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MAKING THE GRADE

The Development Report Card For the States

March 1987

THE CORPORATION FOR ENTERPRISE DEVELOPMENT
with
MT. AUBURN ASSOCIATES
and
INSTITUTE ON TAXATION AND ECONOMIC POLICY

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Robert E. Friedman
President
The Corporation for Enterprise Development
March, 1987

Prologue

Even as Congress debates the question of how to make the American economy competitive again, the answers are already emerging in State Houses throughout the country.

In the struggle to overcome the human and economic damage caused by the last recession and adapt to the rapid restructuring of the global economy, states have developed a new formula for creating and sustaining economic vitality -- a formula which echoes many of the themes that were central to the founding of our nation and that spurred its rapid rise to international economic prominence: the entrepreneurial spirit, freedom of opportunity, belief in the individual and the community, investing in and building for the future, providing for an educated populace, partnerships, and more. This new formula is reshaping the economic landscape and rendering useless and outdated the old formula for measuring the "business climate" of states:

- Where the old formula pit state against state in frenzied efforts to attract footloose factories, the new formula emphasizes strengthening the chief sources of new jobs and wealth -- the state's own existing businesses and potential entrepreneurs.
- Where the old formula was obsessed with cutting wages, benefits, regulations, taxes, and unions, the new formula emphasizes investment -- in education, training, infrastructure, technology, amenities and other sources of development capacity -- to build international competitiveness.
- Where the old formula saw government as the enemy, the new formula sees government as a partner responsible for building the basic foundations of the economy.

But while states across the nation have revolutionized the business of "economic development," the means by which we rate the vitality and attractiveness of states -- indexes based on the old notion of "business climate" -- have not changed.

Until now. This report, the first in an annual series, presents the *Development Report Card For the States*, a new yardstick for measuring the economic health of each of the fifty states in the Union and for exploring their ability to generate sustained and widely shared growth. It is designed to serve the interests not of those outsiders who would sit in judgment but of those inside the states who are trying to move ahead.

Why do we need a new index? Because the old definition is irrelevant and destructive. Because it measures the cost of everything and the value of nothing. Because in the life and death struggle for economic competitiveness our, future depends on getting the formula right. Because the entrepreneurs who stake their fortunes and their futures on an idea need to know where that idea is most likely to come to fruition. Because in a world of limited financial resources we need to know what works, if only to avoid costly mistakes. Because the quality of people's lives is defined by the rate at which our economy expands and the extent to which the benefits of that expansion are widely and equitably shared.

Introduction

"Business Climate." No economic issue is more hotly debated in state legislatures, county councils and local chambers of commerce than the "business climate" -- the extent to which an area is perceived to be hospitable to new business. Having a "good business climate" is both the fondest wish of state and local economic development officials and the source of almost constant political heartburn. In the pursuit of this holiest of Holy Grails, state, county and local governments spend hundreds of millions of dollars each year in tax abatements and other inducements which (they have been persuaded) will make them more attractive to industry. No one wants to be seen as unfriendly to new industry.

Thus it is that each June, state and local officials await, with fear and trepidation, the release of the premier "business climate" rating: the *Annual Study of General Manufacturing Climates of the Forty-eight Contiguous States of America* published annually by the Chicago-based accounting firm Grant Thornton (formerly Alexander Grant & Company). Using "22 factors selected by manufacturers as important to business success," Grant Thornton ranks each state, from first to forty-eighth, according to its alleged "attractiveness" to business.

The newspapers love it. Officials in states that score high love it too, and so do their advertising agencies, which immediately crank out ads trumpeting the state's score. Officials in states that score low try to ignore it, but they know that eventually it will be used by some company that has expressed a desire to locate in the state but is looking for"sweeteners" to offset the state's "poor business climate."

But let's be fair. If a state is insensitive to the needs of business, if it evidences no desire to create an environment conducive to growth, why shouldn't it be criticized? And if a state is doing a good job of strengthening its economy and making it possible for businesses to grow and prosper, it should get some credit for its efforts. All Grant Thornton does is give credit where credit is due, right?

Wrong. If the Grant Thornton index measures the factors "important to business success," why is it that the states with the highest employment growth in 1985 -- a reasonably direct measure of "business success," after all -- rank lowest on the 1986 index? And why do states that actually lost jobs in 1985, rank at or near the top?

If the Grant Thornton index measures what is "important to business success," why do Massachusetts, Maryland and Rhode Island -- states with among the lowest unemployment rates in the nation -- show up in the bottom of the index?

Why do states with the highest income growth end up near the bottom of the list, while states with little or no growth end up at the top?

Why is it that states that Grant Thornton says have "poor" business climates generate the highest numbers of patents issued per capita -- a key measure of how innovative a state's economy is -- while those listed as having "good" business climates generate few if any new patents?

Why is it that the states at the top of Grant Thornton's hit parade, states like South and North Dakota and Mississippi, trail the rest of the states in new business incorporations, while states with high rates of new business incorporation rank -- you guessed it! -- near the bottom of the list?

The reason is simple. The Grant Thornton index does not measure the factors "important to business success" in today's economy. The index, and the traditional "business climate" definition it perpetuates, are relics from another time, another economy -- an economy based on routine mass production where cheap, low skilled labor is the key to success.

But we don't have that economy anymore. Instead, businesses today compete in a global economy in which entrepreneurship, rapid development and application of technology, identification of niche markets, and the flexibility to custom-craft products and services to the needs of individual customers and markets are, increasingly, the keys to success. Competing in this new economy demands an entirely new set of private and public actions and investments -- a new economic environment -- that the old definition of "business climate" is simply too narrow and incomplete to measure.*

The Corporation for Enterprise Development's *Development Report Card For The States*, presented for the first time in this report, provides a more accurate and more comprehensive picture of how state economies are doing in today's economy and, thus, how "attractive" they *really* are for business development.

State economies are a bit like constellations. It's hard to get a "picture" of what the constellation looks like unless you can see all the stars that compose it -- and even then the "picture" is imprecise. The fewer stars you can see, the harder it is to understand the constellation. What's wrong with the traditional definition of "business climate" is that it focuses on only one small part of the state economic constellation and, in addition, addresses a lot of other things that aren't even in the constellation.

The *Development Report Card* is designed to help see the outlines and parts of state "economic constellations", and evaluate how they are doing. Some of the factors are easy to see -- bright stars -- and others are more obscure -- dim stars -- but *all* need to be examined if we are to get an accurate reading.

The *Development Report Card* is not intended to encourage people outside a state to sit in judgment, but rather to provide people and policymakers within a state with a tool for making progress. No one likes getting low grades, and no one with high grades should feel complacent in this economy. Like school report cards, this one is intended to identify areas where greater *individual* effort is desirable and useful.

Because every state's economy is different and every business has different growth requirements, this system abandons the traditional single numerical ranking in favor of four different indexes that go a long way toward characterizing more completely the vitality and attractiveness of state economies. The system was developed from an extensive analysis of both the building blocks of development and the obstacles to growth: taxation, industrial location, entrepreneurship, service sector growth, high technology, foreign investment, labor-management relations, unions, workers' compensation, capital market operations, infrastructure investment, plant closings and disinvestment, environmental regulation, and more. More than a hundred studies which considered the actual investment decisions of thousands of businesses were reviewed. The research was guided by a technical advisory board composed of economists and representatives from business, labor, government and community development organizations.

Chapter One of this report describes the fundamental changes that have reshaped the nation's economy and explains what we need to measure in order to create a reasonably accurate picture of individual state economies and their prospects for economic development.

Then, Chapters Two through Five present the details of the four indexes that comprise The Corporation for Enterprise Development's *Development Report Card*, and the summary results from applying them to the states.

Chapter Six describes, by way of conclusion, what the *Report Card* means for the states and the people who live in them.

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* The inadequacies of Grant Thornton's index are analyzed in detail in *Taken For Granted: How Grant Thornton's Business Climate Index Leads States Astray,* published by The Corporation for Enterprise Development in 1986, and are not repeated in this report.

Finally, Appendices provide:

- Tables displaying in detail the results of applying each of the measures in all four indexes to the fifty states.
- A detailed discussion of the methodology used to create this *Report Card*, including a candid assessment of the limits of the data used and the strengths and weaknesses of each of the indexes.
- A brief listing of the background literature reviews conducted to produce this *Report Card*.
- A bibliography.

WARNING

Even with this new, more comprehensive system, we still do not have a perfect picture of state economies -- though this system is a quantum leap beyond anything heretofore available. One reason we lack clear pictures is that although the economy has changed dramatically in recent years, the way we collect information about it has not. There are no easy measures, for example, of "opportunity." Many of the indicators of economic well-being in today's economy can only be approached indirectly, through the use of "proxies" which, we note quite candidly, are less than ideal. Some of the most important measures -- like the quality of life in a community -- simply cannot be addressed adequately at this stage. Some measures are too dated to use; as it is, this *Report Card* will not generally reflect changes which occurred in the last year.

The important thing, however, is that this system at least recognizes the importance of these measures -- however difficult they may be to pin down -- in any rigorous, realistic and relevant attempt to characterize state economies. Where proxies are available, we use them. Where they are not, we say so and indicate how we intend to correct the problem next year. When we have no idea how to measure effectively a given characteristic, we say so.

Better to face the challenge of international economic competitiveness equipped with some of the tools for success and *risk* failure than to pretend the challenge does not exist and *guarantee* failure.

Chapter One: Taking the Measure of State Economies

We stand at a new industrial divide, as revolutionary in its impact upon familiar economic landmarks as the first Industrial Revolution. In the old economy -- the economy in which the United States was the undisputed champion -- large, vertically integrated industries applied labor, capital and raw materials to manufacture a dizzying array of products for rapidly growing domestic, and international markets. Competition from other countries was limited; the United States was the dominant or sole producer of most of the goods and services produced and consumed here.

In today's economy, industries that might best be described as internationally-integrated apply these same inputs, now gathered globally, to produce even more sophisticated products -- and, increasingly, services. In many of these industries, the brute strength of human labor has been replaced by technology -- a higher value and, in the long run, a cheaper input. In other industries where people are still required to perform routine tasks -- like assembling computers and inspecting microchips -- these industries seek labor wherever in the world it can be obtained at lowest cost.

To a significant extent, America's "competitiveness crisis" -- and such associated problems as our high unemployment and international debt -- arose because we were slow to recognize that the old economy was being eclipsed. Suddenly, 75 percent of the things we produce are subject to international competition -- and not simply by "copycats," but by foreign companies which are producing goods and services more innovative, technology-intensive and valued than our own.

What's more, the changes underway in the global economy are accelerating. While we struggle with the unemployment caused by the flight of routine, low-skilled jobs to countries where wage rates are low, our competitors have already realized that the "big money" comes not from the end of the product cycle, where large numbers of low-paid workers assemble mass-produced products, but closer to the beginning of the cycle, where research, ingenuity and risk capital come together to create new products and services that are better than those already being produced, or that are so ingenious that they create entirely new market demand.

In short, our economy has changed. The mix of businesses that drive our economy has changed. The nature of work itself has changed, along with the factors that define "being competitive": an educated and adaptable workforce, long-term capital investment, the development and application of new technologies and management techniques, government commitment to nurturing new businesses, and entrepreneurship. The tools we once used to spur economic growth no longer work very well, and in some cases actually weaken state economies. Not surprisingly, the yardsticks we once used to measure the success of those tools no longer measure what is important to economic growth.

Asking the Right Questions

If we want to take the measure of a state economy, gauge its vitality and conduciveness to new business, we need to ask some very basic questions about what makes it "tick." At the most basic level, what makes an economy "tick" is people.

People work in order to obtain the elements of what they perceive to be "a better life." For the officials who worry about economic development, the challenge is to help assure that opportunities for people to obtain a better life are expanding and can be shared by everyone. But we can't ask everyone whether they feel they have such opportunities, so to get a picture of how successful people are at achieving a better life -- that is, how successful economic development is -- we need a few measuring tools. The question is, which tools?

If you wanted to know whether people were succeeding at obtaining a better life, something which inevitably costs money, you might want to check whether their income was sufficient to meet their basic needs. You'd also want to know whether their income was growing or not, keeping up with the cost of living or not. You'd want to know whether they could achieve their dreams.

Since the way most people obtain income is through work, you'd probably want to know something about their jobs. Are there enough jobs to go around? If jobs exist, do people have the skills to qualify for them? Does everyone have a fair chance of obtaining a job if they're qualified? Do the jobs pay enough to meet people's needs? Are they reasonably secure jobs with a future or are they threatened by change? Do people have the opportunity and the skills they need if, for whatever reason, they want to change jobs?

Since businesses create jobs, and most of the new jobs created in any state economy come from the businesses that are already there, you'd probably want to know something about what kind of businesses there are in the state and how they are doing. Are they growing or shrinking? What determines whether they will succeed or fail? Are they doing the things within their power to ensure their own success?

And since a lot of other things influence the success of businesses -- and therefore people's ability to obtain a better life -- what else is happening in that economy that will affect its capacity to meet people's needs? Who are the other players? Are they keeping up their end of the bargain?

Finally, there are qualitative questions. When people are happy with their community, their work, and their lives, what are the components of that happiness? How do you gauge the quality of their lives? And when businesspeople talk about places they feel are "good for business" these days, what do they mean? What are the components of that condition?

What's Wrong with the Old "Business Climate" Definition

The problem with the traditional definition of "business climate," and any index based upon that definition, is that it is largely irrelevant in today's economy. It *may* have been useful in the old mass production economy, though even that is arguable, but it has almost nothing to do with current economic conditions. In short, it does not address the right questions.

A state is said to have a good business climate if corporations considering locating branch plants in the state are made to feel "welcome." The conclusion we are meant to draw is that when businesses are made to feel welcome, economies will thrive and people will have a better life. But do they?

This "welcomeness" traditionally combines low taxes, low wage levels, minimal or no unionization, low or leniently-enforced regulation, and low public spending, with a willingness to provide tax abatements, preferential financing rates, regulatory exemptions, provision of land and often physical plant, and other facility siting "sweeteners."

The idea is to get that branch plant -- or whatever industry is being courted -- into the state before someone else makes a lower bid. You do whatever it takes, pay whatever it costs, to get those jobs. A state with a "good business climate" doesn't try to distinguish between high-paying jobs and low-paying jobs, between growth that widens income disparities and growth that narrows them, between growth that provides short-term benefits at the expense of long-term costs and growth that will strengthen the economy of the state for a long time to come. A state with a "good business climate" doesn't ask itself whether a business so footloose that it can be lured to the state by tax abatements won't become footloose again when those abatements end. A state with a "good business climate" is not concerned about the inherent inequity of providing special incentives to outsiders and expecting home-grown industries -- the principal source of new jobs in any economy -- to pay the freight.

States that score high under the traditional "business climate" definition keep taxes low, trading off investment responsibilities in road and rail maintenance, water and sewer systems and the like for the chance that a manufacturer might be attracted by the low taxes. They keep state investments in human services, job training and education low for the same reason. They strive to keep workers' compensation and unemployment benefits down. State-supported research is minimized. Environmental, health and safety standards are delayed and, once finally established, go unenforced so as not to antagonize industry.

Quite apart from the equity questions raised by this approach to economic development, a key question raised by the traditional business climate definition is: *What kind of economy do you get if you follow this formula?*

What you get is an economy based heavily on industries at the very tail end of the product cycle, where all labor functions are routine and education and skill requirements are low, and where least-cost production, determined primarily by tax and wage rates, is the primary goal. What you get is the Koreanization of industry. What you get is the economy of Singapore. Or Taiwan.

Scoring high on an index based upon this formula is a public declaration that you have a Third World economy. Indexes that emphasize these factors are not indexes of economic attractiveness, they are indexes of economic impoverishment.

The fundamental flaw of the traditional "business climate" definition is simply that it applies to economic circumstances that, for all intents and purposes, no longer exist in the United States. Because it addresses the wrong questions, it tends to deliver the wrong answers. In fact, a recent study found that the level of a state's manufacturing employment and profits varies *inversely* with its ranking on the Grant Thornton index.[1]

But if the traditional "business climate" definition does not address the health of state economies or their attractiveness to today's businesses, what would? Before we can choose yardsticks we need to be clear about what we want to measure -- that is, we need to be clear about what is important in today's economy.

What's Important in Today's Economy

There are clues to what is important in today's economy in the shift that has occurred in the factors businesspeople now look for when they consider starting, expanding or moving a business. While many state officials are still preoccupied by "business climate" issues, businesspeople themselves are way ahead of them. With evidence all around them that the economy is changing, they have a new list of the things that are important to their businesses. A study conducted a few years ago by the Harvard-MIT Joint Center for Urban Studies asked manufacturers to identify which location factors they considered "musts." State-controlled business costs -- key elements in the traditional business climate definition -- didn't even make the list. And the labor rate, while it was cited by 30 percent of the respondents, was far behind such factors as "proximity to markets," "attractive place for engineers and managers to live'" and "proximity to supplies, resources." The same study found that plant relocations were an insignificant source of new employment for states and that, even in those rare cases where new branch plants were being developed, fewer than 15 percent received tax abatements or concessions of any kind.[2]

What mattered to these businesspeople -- and what matters in today's economy -- were direct government services like road, sewer and other infrastructure investments; an educated workforce backed by effective labor training programs, and coherent environmental regulations. Such programs were cited twice as frequently as all forms of financial aid taken together.

If state economies no longer revolve around abundant supplies of cheap routine labor and a "look the other way" regulatory environment, what *do* they require? What do these clues mean?

For the answer, we have to understand what it means to be "competitive" in today's economy.

In a global economy where the equipment and facilities for routine, standardized mass production can be set up wherever in the world the wage rates are lowest, states seeking expanding economic opportunities have to look elsewhere for a competitive edge. No state can successfully underbid labor rates in the Philippines or Taiwan, and few states really want to. But in the face of high unemployment, virtually no measurable economic growth, a steadily increasing national debt and fierce competition for markets, what *can* states do to increase the competitiveness and vitality of their economies?

Increasingly, the businesses that are succeeding in today's economy are those producing technology-intensive products and services that are changing so quickly that they are obsolete before they can be routinely mass-produced by an overseas, low-wage competitor. The businesses that are succeeding also include those capable of producing products and services tailored to the specifications of narrow niches in the market and even to individual customers.

The common-denominator for all of these industries is *ideas* -- research, inventiveness, and ingenuity in the creation of new products and services or in the adaptation of old ones, and the flexibility and agility to continually improve and revise those products and services to meet rapidly changing market demands.

And these characteristics are not limited to those businesses we normally think of as "high-tech." Several recent studies have shown conclusively that the computer-related industries that usually fall into that category will provide only a small percentage of the new jobs we will need in the future.[3] More important is the successful application of these characteristics in even our most basic industries -- in the highly-competitive special ized steel mills, in the increasingly technology-enhanced durable goods manufacturing industries, in financial services, and so on. The competitiveness of these and other industries -- and the economic vitality of the economies of which they are a part -- rests upon the rapid development and application of new ideas.

What does this kind of economy require? What will make it more vital, more competitive, more successful at providing businesses and the people who work in them with expanding, shared opportunities for a better life?

In a worldwide economy where innovation, flexibility, resilience, and adaptability are the keys to business success, the strength of a state's economy -- and the welfare of people who make up that economy -- depends upon our ability to develop and make full use of the talents of all of the people who are part of that economy; upon our willingness to invest in and maintain the business and industrial infrastructure that forms the foundation of the economy; upon long-term investments in education and research; upon strengthening businesses, large and small, that already are a part of that economy; and upon the development of new partnerships between the private and public players in the economy.

If you want to measure what is "important to business success" in today's economy, *this* is what you have to measure.

Measuring State Economies

Taking the measure of this economy, however, is not a simple undertaking. Every state's economy is different and every business's requirements for growth are different. How would we recognize a state with an economic environment supportive of business development under today's competitive conditions if we saw one? What are the reference points of a state's "economic constellation" that, when seen all at once, would give us, if not a complete picture, then at least the general shape of the economy and an indication of whether it was a good place for businesses to grow?

We can "see" the general shape of a state's "economic constellation" by the answers to four questions:

1. How well is the state's economy *performing* its job of providing people the opportunity for a better life?
2. How *vital* are the businesses that compose the state's economy?
3. What is the state's *capacity* for expanding growth and opportunity?
4. What *policies* has the state established to help foster business growth and economic opportunity?

These four factors -- Performance, Business Vitality, Capacity and Policies -- are the indexes that form the basis of the *Development Report Card*. The measuring tools used in each of these indexes are introduced below and described in detail in the following four chapters.

The Performance Index

With the possible exception of bankruptcy lawyers and auctioneers -- the undertakers of the economy -- few businesses are interested in expanding or locating in an area that is dying economically. Business development is not an end in itself, but a means to an end. Thus, the bottom-line measure of how an economy is doing and whether it is a good place for businesses to grow is its current performance -- that is, whether it is providing people real opportunities for a richer and better life.

It seems so obvious that it is nothing short of astonishing that the traditional definition of "business climate" ignores completely this most basic measure of economic strength and attractiveness.

The Performance Index incorporates five sub-indexes:

1. *Employment* (including employment growth, the unemployment rate, the duration of unemployment, the status of displaced workers);
2. *Income* (earned income per capita, income change per capita, percent below the poverty line);
3. *Job Quality* (number of working poor, hourly earnings, job-related deaths, health coverage);
4. *Equity* (the distribution of income, black income as a percentage of white income, AFDC benefits as a percentage of per capita income); and
5. *Quality of Life* (doctors per capita, life expectancy, and infant mortality).

The Business Vitality Index

No firm, no industry can survive forever unchanged. Indeed, in a rapidly changing, globally competitive economy, survival for a business depends upon its ability to constantly seek and develop new products, services, production processes and markets. Survival for an economy depends upon its ability to spawn new firms, foster the expansion of young small firms and ensure innovation in large mature firms.

Thus, the "attractiveness" of an economy is determined, in part, by how businesses already within that economy are doing. We can determine something about the vitality of a state's economy by documenting the dynamism of businesses of all sizes and at all stages in their life cycle. Moreover, if we can measure their resilience, market strength, diversity and rate of investment, we can begin to get a picture of how competitive they are.

The Business Vitality Index includes two subindexes:

1. *Competitiveness* (international exports, manufacturing investment per production worker, percent of high growth companies, and presence of Fortune 1000 corporation headquarters); and

2. *Entrepreneurial Energy* (business formation rates, self-employment rates, and minority and women business ownership).

The Capacity Index

If you are a businessperson interested in either creating, expanding or relocating a business, three of the most important factors determining if you'll decide to build that business will be the availability of labor (appropriately trained workers, technicians, and managers), the accessibility of financial capital, and the adequacy of the basic infrastructure essential to economic growth -- roads, water, sewer and so forth. In short, you'll want to know whether that economy has the *capacity* to support your business needs. A good place to grow or locate a business has these resources available. A bad place to grow a business doesn't.

These are crucial needs for economic development. It's hard to make someone feel welcome when you have nothing to offer. The great irony of the traditional "business climate" definition is that it penalizes those states which provide for these needs (through tax-supported capital budgets and education and training programs, among others) and rewards those states which do not. At the top of the list are those states which make no investment in their capacity to support economic development; at the bottom are those that do.

Any state's capacity to support economic development and make businesses feel welcome is based on two things: its stock of human, natural and capital resources and infrastructure; and how it uses and enhances that stock of assets.

The Capacity Index incorporates four subindexes (human capital, financial capital, infrastructure and amenities) and each subindex measures several key indicators:

1. *Human Resource Capacity*

   (a) *Labor Force Skills and Educational Quality* (college education attainment, high school graduation rate, public expenditures per pupil, teacher/pupil ratios, and net migration of college students);

   (b) *Technological Innovation and the Pool of Innovators* (scientists and engineers as a percentage of work force, physical science and engineering doctoral degrees awarded, patents issued per thousand residents, university and federal research and development spending); and

    (c) *Entrepreneurial Awareness* (content analysis).

2. *Financial Resource Capacity*

    (a) *Capital Resources* (commercial bank deposits per capita; dividend, interest, and rent income per capita; venture capital); and

    (b) *Capital Utilization* (loans-to-equity ratio, commercial and industrial loans per nonagricultural employee).

3. *Physical Infrastructure* (transportation system capacity, sewage treatment plant capacity, airport capacity).

4. *Amenities* (doctors per capita, state arts agency appropriations, foundation grant funds).

The Policies Index

One of the few things about which Republicans and Democrats consistently agree is that success in today's economy depends upon new partnerships between private industry and public policymakers. They may differ on the details, but not on the general rule. The reasons are several. Perhaps the simplest is that neither government nor private industry can *afford* to go it alone anymore -- the needs are too great and the investments too big. While campaign rhetoric may emphasize "getting government off our back" or the evils of "big business," it is clear that government and business need each other. But there are more subtle reasons as well. Economic development, by its very nature, has both private and public dimensions. Businesspeople want their businesses to grow. Public officials want to ensure that growth expands and that its benefits are widely and equitably shared.

For practical reasons, if not for ideological ones, there is increasing public agreement that if the old maxim "that government which governs best, governs least" isn't entirely accurate, then perhaps "that government which governs best, governs thoughtfully" is closer to the mark. Increasingly state governments and private industry are working in partnership to achieve economic development objectives that they are unable to achieve singly.

A private market economy is, after all, private. There are some things that, by definition, it can't do (like providing for the unemployed, or spurring certain kinds of investment or development). Those are public responsibilities. Moreover, there are some things that a private market economy does imperfectly (like assuring clean air or water, or providing sufficient capital to certain kinds of enterprises, or guarding against prejudice, or assuring adequate investment for things that have very long-term payoffs like public education). That's why we have governments -- to equalize the distribution of the benefits (and costs) of the economic pie in some cases, and to expand the pie in others.

The roles that state governments play in economic development are several: as *broker*, bringing together private actors who have common goals; as *catalyst*, creating economic outcomes through leadership or incentives; as *investor*, particularly where private investment fails, as in education and public works, but also through direct investment; as *regulator* to ensure that public interests are protected in private economies; and as *stabilizer* offsetting the negative human effects of swings in the fortunes of private markets, as in the case of cyclical employment programs.

Recently, state governments have become active partners in economic development, devising an imaginative array of policies and programs explicitly designed to improve the vitality of their economies and to create the conditions for business growth. The range of initiatives is so broad, however, that no index could successfully calibrate them. Moreover, no two states are the same and, thus, not all policies and programs make sense in every state. Consequently, this Policies Index gathers the initiatives into nine broad categories and, rather than attempting to weigh and rate states in terms of each type of policy or program, simply addresses whether they do or do not exist in that state. The rationale is simple: states that have such programs, however they are organized, present a more welcome environment for economic growth -- and a greater likelihood that their residents will have opportunities to achieve a better life -- than states that do not.

The Policies Index gathers state economic development policies and programs into seven categories:

1. *Improving Governance and Regulation*;
2. *Creating an Effective and Equitable Tax Code*;
3. *Mobilizing Capital*;
4. *Enhancing Technology and Business Development*;
5. *Building and Maintaining Public Works*;
6. *Investing in Human Resources*; and
7. *Helping Distressed Communities.*

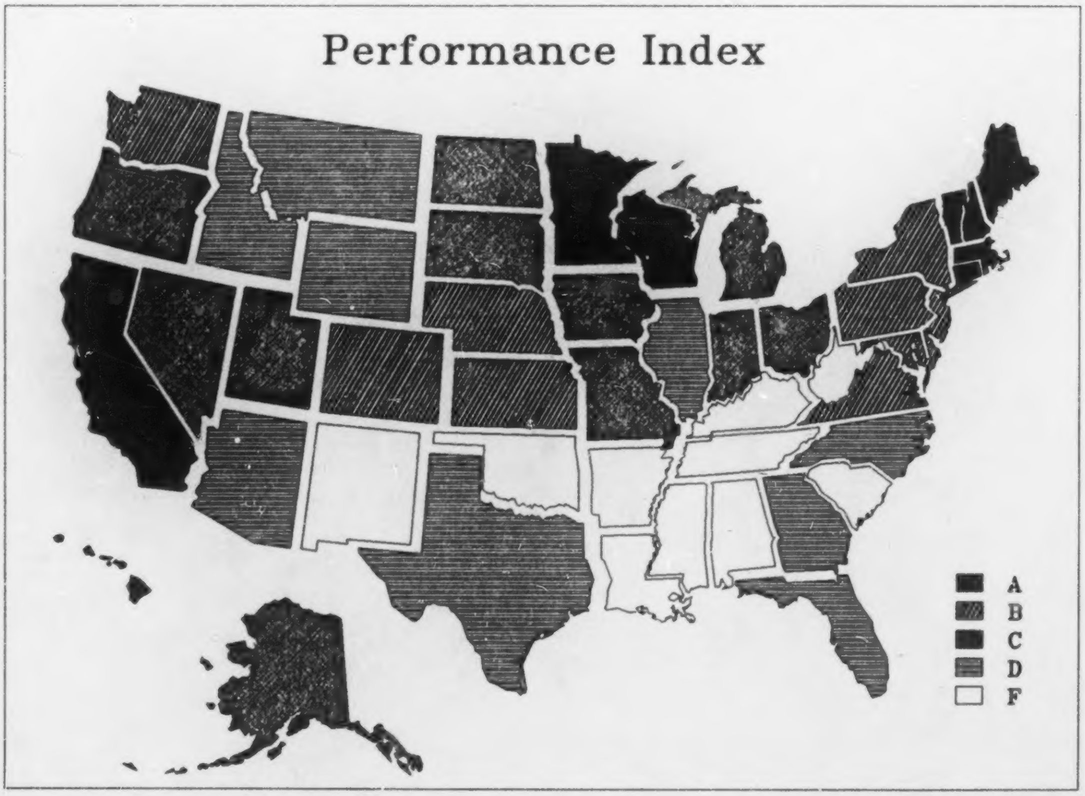
These four indexes -- Performance, Business Vitality, Capacity and Policies -- do *not* perfectly illuminate the economies of the states or flawlessly illustrate their respective conduciveness to business and economic growth. But they *do* provide a coherent overall picture of these conditions. Specifically, they both identify and measure with reasonable accuracy those factors crucial to achieving the purpose of economic development in today's economy: creating expanding opportunities for all of us -- workers, technicians, managers and entrepreneurs alike -- to achieve a better life.

1. See Paul N. Courant and George A. Fulton, "What Do Business Climate Studies Have to Do with Business?" Institute of Public Policy Studies Discussion Paper No. 243, University of Michigan, 21 November 1985; and Paul D. Warner and Lawrence A. Weiser, "An Assessment of Business Climate Studies," paper prepared for the Seventh Conference on the Small City, Stevens Point, Wisconsin, March 1986.

2. Roger Schmenner, "Location Decisions Of Large Firms: Implications For Public Policy," *Commentary*, January 1981.

3. Council of Economic Advisors, *Annual Report* (Washington, D.C.: U.S. Government Printing Office, 1984).

Chapter Two: The Performance Index


Performance Index
A
B
C
D
F

Performance Index Report Card

	Employment Subindex		Income Subindex		Job Quality Subindex		Equity Subindex		Quality of Life Subindex		FINAL GRADE	
	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade
Alabama	36	D	42	F	44	F	43	F	41	F	48	F
Alaska	25	C	11	B	24	C	16	B	47	F	23	C
Arizona	4	A	30	C	35	D	40	D	29	C	32	D
Arkansas	33	D	38	D	46	F	47	F	19	B	43	F
California	18	B	11	B	13	B	23	C	20	B	9	A
Colorado	12	B	8	A	34	D	30	C	25	C	20	B
Connecticut	13	B	3	A	6	A	6	A	17	B	2	A
Delaware	5	A	7	A	16	B	36	D	34	D	16	B
Florida	8	A	18	B	45	F	43	F	37	D	37	D
Georgia	7	A	25	C	39	D	47	F	48	F	39	D
Hawaii	31	D	24	C	14	B	5	A	12	B	10	A
Idaho	35	D	45	F	32	D	18	B	8	A	32	D
Illinois	48	F	15	B	3	A	29	C	44	F	34	D
Indiana	34	D	35	D	10	A	9	A	25	C	22	C
Iowa	46	F	37	D	19	B	28	C	2	A	29	C
Kansas	18	B	20	B	27	C	17	B	14	B	15	B
Kentucky	41	F	41	F	40	D	37	D	31	D	46	F
Louisiana	47	F	48	F	36	D	50	F	50	F	50	F
Maine	16	B	14	B	26	C	3	A	5	A	5	A
Maryland	11	B	5	A	12	B	31	D	45	F	18	B
Massachusetts	10	A	1	A	8	A	8	A	12	B	1	A
Michigan	44	F	32	D	2	A	7	A	43	F	25	C
Minnesota	26	C	10	A	20	B	2	A	4	A	4	A
Mississippi	40	D	49	F	48	F	49	F	39	D	49	F
Missouri	28	C	26	C	21	C	34	D	21	C	28	C
Montana	38	D	46	F	36	D	15	B	15	B	36	D
Nebraska	31	D	19	B	29	C	11	B	3	A	13	B
Nevada	17	B	17	B	18	B	26	C	46	F	24	C
New Hampshire	1	A	2	A	22	C	20	B	9	A	3	A
New Jersey	24	C	4	A	4	A	25	C	31	D	11	B
New Mexico	28	C	47	F	50	F	35	D	23	C	43	F
New York	36	D	8	A	1	A	10	A	37	D	12	B
North Carolina	14	B	29	C	30	C	42	F	41	F	38	D
North Dakota	27	C	33	D	49	F	19	B	1	A	26	C
Ohio	49	F	22	C	6	A	31	D	29	C	30	C
Oklahoma	21	C	42	F	42	F	38	D	34	D	41	F
Oregon	43	F	38	D	11	B	23	C	22	C	30	C
Pennsylvania	44	F	22	C	9	A	11	B	18	B	18	B
Rhode Island	9	A	13	B	15	B	21	C	16	B	7	A
South Carolina	22	C	40	D	43	F	41	F	49	F	47	F
South Dakota	20	B	42	F	47	F	13	B	7	A	26	C
Tennessee	39	D	33	D	30	C	45	F	36	D	43	F
Texas	15	B	26	C	41	F	46	F	40	D	40	D
Utah	6	A	36	D	36	D	22	C	11	B	21	C
Vermont	3	A	26	C	33	D	13	B	6	A	8	A
Virginia	2	A	6	A	23	C	39	D	33	D	17	B
Washington	30	C	20	B	17	B	4	A	23	C	14	B
West Virginia	50	F	50	F	28	C	27	C	27	C	42	F
Wisconsin	41	F	16	B	5	A	1	A	9	A	6	A
Wyoming	23	C	31	D	25	C	33	D	28	C	35	D

Ed Koch, the colorful mayor of New York City, spends a good deal of time asking people on the street "How am I doing?" It's an interesting question. He knows people don't measure him by how well he handles the minutiae of governance, but by whether the garbage gets picked up, potholes get filled, and people feel New York is a good place to live.

It's the same with state economies. There are hundreds of ways to measure the health and attractiveness of a state economy -- and the *Development Report Card* uses many of them -- but the bottom line is whether that economy is meeting its primary goal: assuring widely-shared, long-term economic well-being.

So the first question to ask is: *How is the economy doing?* It is so basic that the fact that the traditional "business climate" definition doesn't even address the question indicates just how misdirected that definition really is. The root of this misdirection is that the old "business climate" definition describes the economy almost solely in terms of sales, profits and investment.

But if you ask the person on the street how the economy is doing, he or she will answer in terms of jobs, income and quality of life -- the same way they answer Ed Koch.

And the fact that they answer this way tells us something fundamental about economic development: the purpose of economic activity is to support and improve the lives of people; the purpose of economic development is to expand the opportunities for people's lives to improve. Business and governments' efforts to improve business vitality are the means to that end.

That is not to say, however, that the performance of a state's economy is of interest only in terms of social well-being. The fact is that businesses are more likely to be spawned in and attracted to economies that are performing well than to those that are not. Good current performance in employment, income and equity, for example, will generate a level of economic energy and investment that, properly channeled and reinvested to strengthen the base of human and physical capital, will improve a state's competitive position, foster the birth of new firms and nurture existing ones, and, over time, build the foundations of the future.

The Performance Index has five subindexes:

1. Employment: the extent to which the economy is providing jobs for those who want them;
2. Income: how much people get paid for their work;
3. Job Quality: the extent to which their income and other non-cash benefits meet basic needs;
4. Equity: the extent to which the opportunity to work is widely shared; and
5. Quality of Life: a rough measure of aspects of people's social and physical environment that are not employment-related.

But first, an additional note about the Performance Index. It is a kind of "snapshot" of an economy at one moment in time. It measures neither progress from the past nor, more importantly, prospects for the future. In many ways, economic history is the record of the sacrifices one generation makes to assure a better life for the next. As the evidence mounts that, for the first time in recent history, younger Americans are earning less, not more, than their parents, and in the face of increasing debt which some argue buys present consumption at the expense of future growth, we should be particularly concerned about the sustainability of the economy. The Performance Index does not -- indeed cannot -- measure sustainability. But this index, particularly when combined with the three indexes that follow, can point the direction of the future.

Subindex One: Employment

For the great majority of a state's residents, the principal indicator of economic performance is the opportunity to obtain a job. In this subindex, we examine four measures of the ability of a state economy to provide that opportunity: employment growth, the unemployment rate, the duration of unemployment, and the employment prospects of displaced workers.

- *Employment Growth*

Jobs are continually being created and eliminated, just as people are continually moving from one job to another and in and out of the labor force. This indicator measures the net job growth (or decline) experienced by a state between 1980 and 1985 in an effort to characterize the degree to which job opportunities are being provided by that economy.

- *Unemployment Rate*

State unemployment rates are an imperfect measure of the mismatch between jobs and job seekers. They count some people not really looking for work, and fail to count many people who have been forced to take part-time in lieu of full-time work, or who have become so discouraged by their inability to find work that they have dropped out of the workforce entirely. But since these imperfections are relatively constant from state to state,[4] it is the best indicator currently available.

- *Duration of Unemployment*

One of the ways of increasing the usefulness of unemployment figures is to measure how long people have been unemployed. Short-term unemployment can occur for a variety of reasons, not all of them negative, and so long as the unemployed worker finds a new and comparable job, with wages and benefits the same or better than the lost job, the cost of the period of unemployment to the worker and to society can be minimal. Indeed the worker's ability to move relatively smoothly from one job to another indicates an economy offering a high degree of opportunity and flexibility and provides the worker a measure of economic freedom.

Long-term employment, on the other hand, reflects a serious mismatch between workforce skills and job availability, a condition that can occur for at least three reasons: (1) the economy is failing to produce jobs, (2) the jobs being created do not match the skill levels of the existing workforce, or (3) the hiring of certain groups of workers is being restricted by some form of discrimination. Whatever the cause, human resources are wasted and development is constrained.

This indicator measures those who have been jobless for more than 27 weeks, bypassing the short-term unemployed and focusing on the point at which unemployment compensation benefits, which can be a disincentive to reemployment, have expired.

- *Status of Displaced Workers*

According to the Bureau of Labor Statistics, the recession during the first half of this decade put some 10.3 million people out of work in a manner which indicated that the job losses would be permanent. Half of that total defined as "displaced" were workers with three or more years of experience. By January 1986, 67 percent of those displaced in the preceding five years had found new jobs, 18 percent were still unemployed, and 15 percent had given up the search and left the workforce.[5] The availability of state data on displaced workers is uneven and only truly reliable for the ten or so largest states. Nevertheless, in the absence of more reliable figures, this measure provides some real insight on the ability of state economies to deal with the job losses caused by the restructuring of the economy.

Subindex Two: Income

The possession of a full-time job in America today is no guarantee of economic self-sufficiency. A full-time job at minimum wage provides a sub-poverty level income for a family of four. Income adequacy is perhaps the most straightforward indicator of how people and economies are doing. Three indicators are used in this Subindex: earned income per capita, per capita income change, and the percent of the population below the poverty line.

- *Earned Income Per Capita*

Wages and salaries are the principal source of income for most Americans. In fact, some 83 percent of per capita income produced in the United States comes from employment, rather than from stocks, bonds, businesses and other income-producing assets. Thus, the best way to measure how most of us are doing is to measure per capita earnings.

- *Income Change Per Capita*

To get beyond income levels to income trends, this indicator measures how income has changed between 1980 and 1985. Unlike the earned income measure, this indicator includes non-wage and salary income sources and is adjusted for inflation so as to more accurately illuminate standard of living.

- *Percent Below the Poverty Line*

An economy with a high percentage of people below the poverty line -- whether they work or not -- is an economy that is not doing the job of providing people with opportunities for a better life. In a very human sense, it is a clear indicator of economic failure.

Subindex Three: Job Quality

Employment and income figures give us only part of the "snapshot" of how an economy is doing. If people are working long and hard and still remain below the poverty level, if they have a high likelihood of being injured on the job, and if injured or simply ill are unable to obtain adequate medical care, the economy is failing in crucial ways. As a first cut at measuring the quality of the jobs in a state economy we examine: the number of working poor, hourly earnings, job-related injury rate, and health coverage.

- *Number of Working Poor*

A refinement of the overall population below the poverty line, this indicator measures the number of people working in low-wage industries who, despite their full-time work, still live below the poverty line. This measure also provides an indirect indication of the extent to which people are covered by health and related benefits that the rest of the working population has come to take for granted, because few of the jobs the working poor hold provide any benefits.

- *Hourly Earnings*

The hourly earnings of production workers is a useful guide to the likely average pay for manufacturing employees in a state. The data, which are highly reliable and current, comprise the most accessible indicator of relative wages.

- *Job-Related Deaths*

This indicator provides a rough approximation of job-related health and safety. To an extent, the incidence of work injuries is a reflection of state industrial structure, and the only data readily available on this subject cover only the construction and mining industries. To avoid penalizing those states with large industries in these sectors, the results are corrected and presented as a percentage of mining and construction employees.[6]

- *Health Coverage*

Many of the jobs being created in today's economy provide no health benefits.[7] For Americans who are neither very poor nor aging, health insurance coverage can depend solely upon the willingness of employers to provide such benefits. Individual coverage is out of the financial reach of many.

Subindex Four: Equity

The evaluation of the performance of a state economy must be based upon not just the gross employment and income of that state, but the distribution of opportunities to gain employment and income as well. The social and economic consequences of the inequitable distribution of opportunity are only too clear -- poverty, social discord, crime, wasted talent and diminished productivity. The attractiveness and vitality of a state's economy will be influenced in significant ways by how economic change affects the least advantaged in society and the extent to which the best jobs in the state are distributed on the basis of talent and not social status, race, sex or patronage.

As with so many key measures of economic performance, the lack of precise indicators means we must approach the equity issue indirectly, by measuring the distribution of income in the state (the "gini coefficient"), the benefits paid under the Aid to Families With Dependent Children (AFDC) program as a percentage of state income, and black income as a percentage of white income.

- *Distribution of Income*

To measure the distribution of income in a state from the most wealthy to the most poor, we use the "gini coefficient," a statistical technique by which the population is divided by income level intervals and a calculation based on the number of residents in each interval yields a pattern of income distribution. The most inequitable distribution of income -- where one person holds all the income, for example -- would yield a coefficient of 0.0. A perfectly equitable distribution would yield a coefficient of 1.0 -- that is, each ten percent of the population receives ten percent of the income. Reality falls in between. The states with the highest scores -- those most approaching 1.0 -- have the most equitable distribution of income, while those with the most inequitable distributions have the lowest scores, approaching 0.0.

- *Black Income as a Percentage of White Income*

Like the gini coefficient, income by race is an indicator of the distribution of income and opportunity across society. Although states have made significant progress in ameliorating discrimination, significant problems remain. This measure indicates the extent of the economic racial divide between the white and black population and the extent of the inequality of opportunity in each state.

- *AFDC Benefits as a Percentage of Per Capita Income*

Franklin D. Roosevelt said that one measures the quality of a society not by what it does for those who have much, but by what it does for those who have little. This indicator measures a state's willingness to spread the benefits of economic activity to those not currently sharing in that activity. Specifically, this indicator compares the AFDC benefits paid to a family of four with the per capita income of the state, stating the result as a percentage of per capita income.[8]

Subindex Five: Quality of Life

One of the ironies of developing a new set of indexes for evaluating the health and "attractiveness" of state economies is that the factors that are increasingly important determinants of where businesses are likely to grow or locate -- factors having to do with the "quality of life" in the state[9] -- are the ones for which we have the least perfect measures. The issue goes beyond environmental amenities to include a variety of economic, social, and* psychological factors as well, but there are no direct measures and there is no agreement about indirect measures either.[10]

As "quality of life" factors have increased in importance, a variety of measuring systems have been devised, all for different purposes. The United Nations, for example, has a system for comparing the progress of developing countries, but the measures have little relevance to states. The Organization for Economic Cooperation and Development (OECD) has another system which measures the living conditions in OECD countries (health, education, employment, quality of worklife, leisure time, physical environment, personal safety and others) but any such system fails to account for the diversity of conditions within a given state, and in any event very little data is available to apply such a system in the United States, in part because federal funding cutbacks have eliminated data collection programs.

This index recognizes the importance of quality of life indicators in determining economic performance, but is forced at this point to rely on three very narrow and admittedly inadequate indicators for which information currently exists: life expectancy, infant mortality, and a crime index. The development of more encompassing quality of life performance indicators is a major objective of the *Development Report Card.*

- *Life Expectancy*

Surprisingly, there are relatively substantial differences from state to state in average life expectancy. In the absence of more illuminating indicators of the living conditions in states, this indicator offers at least a coarse comparative analysis.

- *Infant Mortality*

Infant mortality is a commonly used measure of the health of the population for a number of reasons that go beyond the death of infants per se. First, infant mortality correlates highly with the health and nutrition of the mother, both of which are, in turn, indications of living standards and access to educational services for prenatal care. Second, mortality during the first year provides insight into the general living conditions of both mother and child during this critical period.

- *Crime Index*

A key component of quality of life is actual and perceived personal safety. The index published annually by the Federal Bureau of Investigation is the most commonly used tool for measuring and comparing the personal safety of the population. The FBI index, a composite of seven types of crimes (murder, rape, robbery, assault, burglary, larceny and motor vehicle theft) has become increasingly valuable for point-in-time comparisons among states as the social acceptability of reporting some kinds of crime -- rape, for example -- has increased. While there may be some reporting bias still inherent in the index, there is no reason to assume significant variation among states.

Findings

Perhaps not surprisingly, the New England states lead in the overall performance index rankings -- a reflection of the complex resurgence of the economies of the individual states in that booming region.[11]

Somewhat more interesting is the strong, if not leading, showing of several heavily industrial states, including New York, New Jersey, Pennsylvania and Delaware in the Mid-Atlantic and Minnesota and Wisconsin in the northern Great Lakes states -- strong evidence that being in the so-called "Frostbelt" is no longer synonymous with decline.

With very few exceptions, the southern states are at the bottom of the overall performance rankings, the victims of a history of low-paying, footloose industries, the steady decline of agriculture, and the somewhat more recent decline of energy-related industries. What is intriguing about these results is that the nation's industrial giants -- states like Michigan, Illinois, Ohio and Indiana -- all have

economies performing significantly better than many of the Sunbelt states, and have been for several years -- despite a lingering and erroneous public perception that the "Rust Belt" is still in the nation's economic cellar.

Employment Subindex Findings

The bottom of the employment subindex is a lot clearer than the top. The nation's big industrial states, still reeling from the recession in the first half of this decade, do poorly -- with Illinois, Ohio, Pennsylvania, Michigan and Wisconsin all in the bottom ten. Also bringing up the rear are several states dependent upon energy, mining, agriculture and timber, all of which have fared poorly in the last few years -- Iowa, Kentucky, Louisiana, Mississippi, Oregon and West Virginia. If anything links the high performers in the employment subindex, it is geographically concentrated technology-based economic booms -- in Massachusetts, Rhode Island and New Hampshire (all revolving around the Boston development phenomenon), as well as in Arizona, Virginia (primarily Northern Virginia) and Georgia (increasingly the economic hub of the South). Several of these states have also experienced substantial population gains (Arizona, Georgia, Florida and New Hampshire) so, in part, employment growth is driven by population growth.

Income Subindex Findings

The Northeast has an almost clean sweep of the top of the Income Subindex reflecting the high wage characteristics of the region's recent economic resurgence. The boom states of New England (Massachusetts, New Hampshire and Connecticut) continue their high showing, and are joined at the top by five strong Mid-Atlantic states (New York, New Jersey, Maryland, Virginia and Delaware). Rhode Island and Maine, particularly its southern counties, share in the rapid economic growth experienced by all areas close to Boston, and are not far behind. Only rural Vermont and industrial Pennsylvania fail to make strong showings. And Colorado is the only non-Northeastern state to make the top ten.

The legacy of low-wage industries places virtually all of the southern states at the bottom of the Income Subindex. Joining them near the bottom are several chronically low-income, thinly-populated Mountain West and Plains states (Idaho, Montana and South Dakota). New Mexico, which has a history of low-wage industries, ranks near the very bottom of this subindex. And the poverty of Appalachia persists in Kentucky and West Virginia.

Job Quality Subindex Findings

For people who work, working conditions and the rewards of work are highest in the industrial Northeast and Great Lakes states. People who work in New York, Michigan, Illinois, New Jersey, Wisconsin, Connecticut, Ohio, Massachusetts, Pennsylvania and Indiana -- states with established major industrial economies -- are the most likely to have safe jobs that pay wages well above the poverty line and provide valuable health benefits.

In contrast, people who work in virtually all of the southern states and in other states that have pursued low-wage business attraction strategies, are the most likely to be earning wages below the poverty line in jobs that have a higher likelihood of injury and that provide few if any health benefits.

Equity Subindex Findings

While states in the Great Lakes industrial belt and in the South have histories of both acute and chronic employment and income distress, how that distress has been distributed among the residents of these states, and how each region has responded to the economic distress of its residents is thrown in sharp contrast by the Equity Subindex. While every one of the southern states ranks at the bottom of the Equity Subindex -- indicating both that the distribution of income (and thus poverty) is inequitable and that the states provide little in the way of assistance to those so affected

-- several of the northern industrial states, including Michigan, Indiana and Wisconsin, are at the very top of this subindex.

Quality Of Life Subindex Findings

This subindex, quite frankly, does not adequately measure all of the aspects of what we have come to call "quality of life." Still, the measures this subindex *does* include -- life expectancy, infant mortality, and crime -- help define the most basic level of the quality of people's lives.

The top of this list is dominated by thinly-populated northern and mid-western states that have experienced few of the negative aspects of urban existence. Two standouts at the top, however, are Minnesota and Wisconsin, industrial states with significant urban centers that seem to have avoided the most troubling symptoms of urban despair.

The bottom of this subindex is dominated by southern states, indicating clearly that they have yet to overcome a historic weakness in the measures that compose this subindex.

4. See Terry F. Buss, "Unemployment Rates and Their Implications for Human Resource Planning," *Journal of Economic and Social Measurement* 14 (1986)

5. Bureau of Labor Statistics, "Employment Status of Displaced Workers," BLS press release, 14 October 1986.

6. Another weakness of this measure is that variations among states may reflect differences in reporting, not actual death rates. Once again, we must deal with the data available until better data can be compiled.

7. See, for example, Barry Bluestone and Bennett Harrison, "The Great American Job Machine: The Proliferation of Low Wage Employment in the U.S. Economy," prepared for the Joint Economic Committee, U.S. Congress, December 1986.

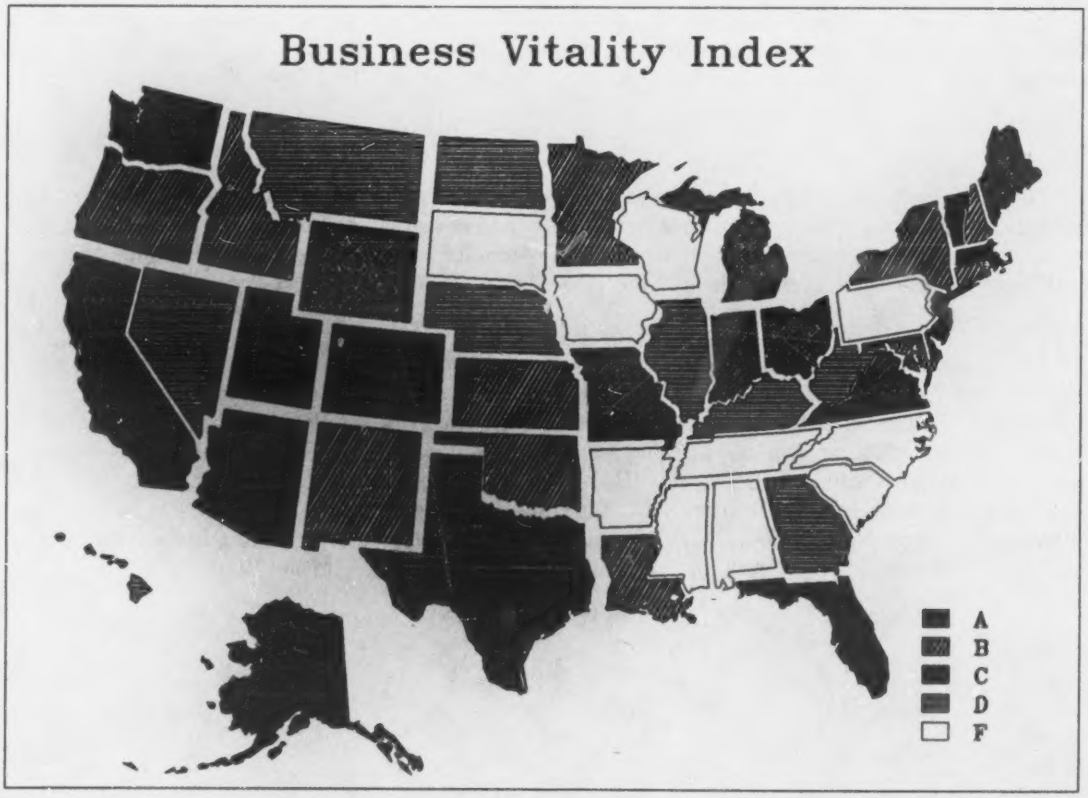
8. Some of the most aggressive and creative reforms of the welfare system in general and the AFDC program in particular are being undertaken at the state level. In this performance index, we do not pass judgment on either the wisdom or likely effectiveness of these state experiments. The objective here is simply to state the extent to which those who do qualify for AFDC payments are capable of supporting themselves and their family members on those payments. See the Policy Index for a further exploration of changes underway in income support programs.

9. See, for example, Roger Schmenner, "Location Decisions of Large Firms: Implications for Public Policy," Commentary, January 1981, and Patricia L. Braden and Susan R. Rideout, "Location Decision-Making in Export-Oriented Business and Industry," unpublished paper, University of Michigan, 1978.

10. Both the Conservation Foundation and the Fund for Renewable Energy and the Environment have developed systems for rating the environmental quality and environmental policies of states. We have examined each and are in the process of designing a system for incorporating the strong points of both, but results will not be available until the 1988 edition of the *Development Report Card.*

11. Throughout the *Findings* sections of the *Development Report Card*, we refer to the following regions: *New England*: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont; *Mid-Atlantic*: Delaware, Maryland, New Jersey, New York and Pennsylvania; *Great Lakes*: Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin; *Plains*: Iowa, Kansas, Missouri, Nebraska, North Dakota and South Dakota; *Southeast*: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia and West Virginia; *Southwest*: Arizona, New Mexico, Oklahoma and Texas; *Rocky Mountain*: Colorado, Idaho, Montana, Utah and Wyoming; *Far West*: Alaska, California, Hawaii, Nevada, Oregon and Washington.

Chapter Three: The Business Vitality Index


Business Vitality Index
A
B
C
D
F

Business Vitality Index Report Card

	Competitiveness Subindex		Entrepreneurial Energy Subindex		FINAL GRADE	
	Rank	Grade	Rank	Grade	Rank	Grade
Alabama	41	F	42	F	49	F
Alaska	4	A	2	A	1	A
Arizona	3	A	6	A	2	A
Arkansas	39	D	30	C	41	F
California	5	A	4	A	2	A
Colorado	13	B	1	A	5	A
Connecticut	7	A	30	C	13	B
Delaware	1	A	48	F	22	C
Florida	18	B	6	A	8	A
Georgia	28	C	38	D	35	D
Hawaii	42	F	19	B	32	D
Idaho	31	D	8	A	15	B
Illinois	24	C	44	F	38	D
Indiana	17	B	35	D	25	C
Iowa	46	F	23	C	41	F
Kansas	36	D	12	B	19	B
Kentucky	40	D	28	C	38	D
Louisiana	18	B	30	C	19	B
Maine	37	D	21	C	27	C
Maryland	16	B	26	C	17	B
Massachusetts	6	A	27	C	10	A
Michigan	9	A	40	D	22	C
Minnesota	14	B	22	C	11	B
Mississippi	48	F	42	F	50	F
Missouri	25	C	33	D	27	C
Montana	49	F	18	B	37	D
Nebraska	43	F	17	B	31	D
Nevada	44	F	20	B	34	D
New Hampshire	20	B	16	B	11	B
New Jersey	20	B	37	D	26	C
New Mexico	32	D	5	A	13	B
New York	12	B	28	C	16	B
North Carolina	32	D	44	F	47	F
North Dakota	45	F	23	C	38	D
Ohio	11	B	47	F	27	C
Oklahoma	37	D	10	A	18	B
Oregon	35	D	13	B	19	B
Pennsylvania	27	C	50	F	48	F
Rhode Island	20	B	46	F	35	D
South Carolina	23	C	49	F	44	F
South Dakota	50	F	25	C	46	F
Tennessee	30	C	39	D	41	F
Texas	2	A	8	A	4	A
Utah	25	C	3	A	9	A
Vermont	8	A	15	B	6	A
Virginia	15	B	36	D	24	C
Washington	10	A	13	B	6	A
West Virginia	29	C	33	D	33	D
Wisconsin	32	D	41	F	45	F
Wyoming	47	F	11	B	27	C

Like Dorothy in *The Wizard Of Oz*, many states go on far-ranging treks in search of an economic "wizard" to sweep away their troubles, never realizing that they possess within themselves the real power to achieve their fondest goals -- and that really "there's no place like home."[12]

Steadily mounting evidence, cited throughout this report, points to four basic principles crucial to business vitality and state economic health:

> *Vital state economies are created by cultivating in-state businesses and entrepreneurs, not by chasing out-of-state branch plants or businesses.*

Most of a state's growth comes from "home-grown" entrepreneurs and businesses, not from outsiders. Between 75 and 80 percent of *net* employment growth comes from new business startups and on-site expansions of existing businesses,[13] and more than half of all new jobs produced come from independent businesses less than five years old.[14] And since entrepreneurs choose overwhelmingly to start businesses where they already live, rather than shop for sites across state lines, what this means is that states already possess within their own borders the chief sources of future economic growth.[15] Moreover, these indigenous businesses are also the primary source of innovation and new wealth creation in any state economy.[16]

What's more, a strong indigenous development strategy can prove to be an effective business attraction strategy as well, since the factors that rank consistently high on the lists of those who make branch plant location decisions -- labor quality, proximity to markets, quality of life and quality of educational systems -- are the same factors that spur the formation and expansion of in-state businesses.[17]

Conversely, the diversion of resources to serve the sole purpose of attracting outsiders, and the impoverishment of the state (through tax abatements and consequent inadequate investments in education, infrastructure and the like) in the pursuit of such outsiders undermines the long-term development potential of the state and its resident industries, in some cases leaving them no alternative but to move elsewhere.

> *What determines the long-term growth prospects of a state is not so much its current performance as it is the ability of existing businesses and entrepreneurs to adapt to and take advantage of change.*

While the current performance of the state's economy -- size, profitability, employment, wage levels, and so forth -- is the base from which its economy will grow, and the future is jeopardized if that base is weak,[18] existing production alone is not enough to assure a bright future. The key determinant is whether the businesses in that base are capable of adapting to current and future change. If a decade ago, for example, we had projected the future vitality of the economies of states in which steel or auto manufacturing predominated solely on the basis of current production, we would have failed to take into account the capacity of those industries to adapt to change; and thus we would have failed to predict the human and economic costs of their inability to do so.

The long-term health of any state economy depends, in large part, upon the ability of the people and businesses within that state to create new products, offer new services, develop new production processes and find new markets. The more rapid the pace of change, the more this is so. Vigorous, vital economies change constantly; those that resist change fall behind.

> *No single industry or sector holds the key to long-term economic vitality.*

While certain kinds of manufacturing industries add disproportionately to the economy by exporting products and bringing new wealth into the state, it takes a diversified economy to guarantee sustainable long-term growth. Diversification is crucial to economic vitality both because it reduces vulnerability to cyclical or unexpected downturns in dominant industries and because, as a practical matter, it is virtually impossible to pick economic winners and losers. Nor is high technology *the* answer; it produces relatively few jobs directly.[19]

The rising service sector is seen by many as a poor substitute for manufacturing because wages can be low and exports minimal. But the service sector has become so diverse that its name obscures more than it illuminates. Recent research has identified at least five subsectors of services, some with significant wage opportunities, skill requirements and exports.[20] Indeed, some service industries -- venture capital firms, for example -- can largely determine the success of other firms.[21]

> *One key to long-term economic vitality is the extent to which businesses and entrepreneurs are taking full advantage of the human, financial, physical and technological resources of the state.*

It is through business activity that the latent capacity or potential of a state (see next chapter) is transformed into economic performance. Tapping the full potential of employees (for example, through new management systems[22]) and potential entrepreneurs, making maximum use of emerging technologies (in older existing industries even more than in new ones), demanding adequate investments in infrastructure, and making creative use of available capital are all crucial to long-term business growth. Thus, by its very nature, business vitality is the product of an aggressive partnership between public and private resource providers.

With these four principles as a base, this index gauges the vitality of businesses within each state, using two major subindexes:

1. The competitiveness of existing businesses, and

2. Entrepreneurial energy.

Subindex One: Competitiveness of Existing Businesses

In today's global economy, in which some 70 percent of what we produce in the United States is subject to international competition, obtaining and sustaining economic success is a function of the capacity of businesses to harness human resources and develop and apply new technologies to produce new goods and services for expanding world markets.

The challenge of international competition is a relatively new one and, as a consequence, few direct measures of how businesses within states are doing at meeting the challenge currently exist. For this first *Development Report Card*, we employ five measures in an effort to get a sense of the competitiveness of existing businesses in each state.

- *International Exports*

A state economy must have a strong traded sector -- that is, firms that produce goods and services that are exported to customers outside of the state and even the nation -- if it is to bring new wealth into the state and remain competitive. The level of international exports, while somewhat incomplete, provides a good sense of the strength of a state's traded sector.

- *Manufacturing Investment Per Production Worker*

We know both that it is harder for large corporations to adjust to change than smaller ones[23] and that the large, mature firms that perform consistently well in today's economy -- in terms of sales, profits and growth -- are those that *do* adapt well to change.[24] They succeed in adapting by operating, in some ways, very like small businesses: they encourage entrepreneurship among employees, invest in them, encourage communication among managers, employees and customers, and they channel a significant amount of capital into technology development and retooling. Measuring the agility and adaptability of existing firms, therefore, requires knowledge of the full range of such investments. At present, however, that information simply does not exist.[25] The closest we can come to approximating such measures is manufacturing investment per production worker -- a measure which is biased to some extent toward states whose economies are dominated by capital-intensive industries.

- *Percent of High Growth Companies*

Each year, *Inc.* magazine records the fastest-growing small private firms in the country. But these "high flyers" are by no means the only small businesses of importance in a state. To more adequately address the full range of rapidly growing young firms this indicator measures the fastest growing firms founded after 1978. The measure is constituted so that it eliminates any bias toward large firms (which might have high absolute growth) or small firms (which might have high percentage growth).[26]

- *Presence of Fortune 1000 Corporation Headquarters*

A crucial measure of competitiveness of any state economy is the ability of the large corporations that dominate that economy to adapt quickly to change. There is, however, no direct -- or even particularly effective indirect -- way to capture that characteristic. Failing this kind of data, we should nevertheless recognize the economic impact of the presence of talent, capital and expertise in a state represented by the top corporations, as measured by the Fortune 1000. In addition to their direct effects, the top corporations tend to spin off their own new enterprises, spawn associated enterprises, and attract new supplying enterprises as well.

Subindex Two: Entrepreneurial Energy

Perhaps the chief gauge of an economy's ability to adapt to and take advantage of change is its ability to create new firms. The increasing role of entrepreneurship[27] in our economy -- the 65 percent rise in business incorporations and the 45 percent rise in self-employment from 1970 to 1984[28] -- reflects the need for innovation in a rapidly changing economy. Young, small firms -- and the individuals who start them -- innovate more, move resources around the economy faster, and can generally move in and out of markets faster and at less expense than larger firms with bigger fixed investments, more layers of management and more restrictive rules.[29] Studies have consistently shown that smaller, younger businesses have higher rates of innovation than larger firms, and that they are able to bring their innovations to market more quickly.[30]

There are, of course, downsides to new business formations. For one thing, they tend to fail (though not as frequently as previously thought).[31] But where business formation rates are high, the losses are often overcome by the gains. Young small businesses do tend to pay less and offer fewer benefits than older, larger companies.[32] But given the fact that the jobs available in new firms offer rare entry opportunities for workers who might otherwise be unemployed, it may be more relevant to compare wage rates in new small businesses with unemployment benefits, rather than large companies. This is not to say that the creation or loss of "good jobs" is unimportant. Understanding why some firms and sectors create them and some do not is critical to developing effective development policies.

This subindex measures two kinds of evidence of entrepreneurial energy: new business formation and self-employment.

- *Business Formation Rates*

Business incorporation rates both understate and overstate actual entrepreneurship. Because of how the statistic is compiled, financial, insurance and real estate businesses are not counted, while paper transactions, like the incorporation of existing firms or the displacement of one firm by another, are counted. Therefore this measure, based on data developed for *Inc.* magazine, deals with all companies founded since 1982 that had at least 10 employees by 1986, and calculates "birth rate" by dividing by the total number of businesses within the state.

- *Self-Employment Rates*

Microbusinesses -- firms that may employ only the founder and one or two others -- can be viewed as the first evolutionary stage in economic growth. They are the proving ground for entrepreneurial ideas, the training school for entrepreneurial skills, the frontier of economic development -- particularly in communities with little to show in the way of economic activity. What's more, they have value beyond the creation of a handful of new jobs and income. Business begets business and entrepreneurship begets entrepreneurship. Successful self-employment offers an example for others to follow, and follow they often do, both within the community and among generations.[33]

■ Minority And Women Business Ownership

The literature argues persuasively that entrepreneurship knows no racial, class or gender distinctions and, in fact, that it is precisely those people for whom economic opportunity is otherwise blocked who are most likely to choose self-employment. It is unlikely that equitable economic performance will ever be achieved for women and minorities unless they are able to enter the economy as entrepreneurs in numbers proportionate to their presence in the general population.

And there are other, less obvious reasons for including women and minority entrepreneurship in any examination of the economic vitality of states. For one thing, minority employers are more likely to put down roots in distressed communities and more likely to hire minority employees than other firms.[34] For another, research suggests that differences in ethnic group business participation rates -- and income levels -- are explained by differences in business formation and self-employment rates, not business failure rates.[35]

Two indicators help illuminate, indirectly, the extent to which opportunities exist in states for entrepreneurship among minorities and women.

- *Women's Business Ownership*

Women's business formation rates have been increasing at a rate three to five times that of men since 1977, indicating both the extent to which entrepreneurship has been bottled up and the extent to which opportunities have been created. Their percentage of the total workforce alone makes measuring the opportunity for entrepreneurship among women a key indicator of economic vitality in any state.

- *Minority Business Ownership*

In a similar manner, and for the reasons cited above, measuring the extent to which opportunities for entrepreneurship exist for minorities and are encouraged as a matter of policy is also a key to determining the economic vitality of a state. Here minority entrepreneurship is measured as a percentage of the minority labor force.

Findings

The findings of the Business Vitality Index tell us a lot about some kinds of businesses and less about others. The relative shortage of useful data on the vitality of large businesses (either because it does not exist, is reported by company headquarters rather than where branches are located, or is complex and expensive to process) means that this index tells us somewhat more about the vitality of new businesses than established ones. As a consequence, this index tells us more about where new jobs are being created and the business energy levels of fast-growing states than about the competitiveness and vitality of older, established industrial states.

The highest overall ranks in the Vitality Index are held primarily by states that embody two characteristics: little or no history of reliance upon older manufacturing industries, and a cultural predisposition to independence and self-employment (Alaska, California, Arizona, Texas and Colorado, among others). They also tend to be states that have seen rapid recent population growth and produce a fairly high level of exports.

The picture at the bottom of the index is clearer. Once again, southern states lag behind the rest of the nation (Mississippi, Alabama, North and South Carolina, Arkansas and Tennessee). They are joined by a few other states whose position is better explained in the subindex discussions below.

We would expect many of the states that led the Performance Index in the previous chapter to do well in this index, and they do. The top performance states -- Massachusetts, Connecticut, New Hampshire, Minnesota, Vermont, Washington and California -- all score in the top 20 of the Vitality Index.

Competitiveness Subindex Findings

Despite our reservations about the precision of the measures available for the Competitiveness Subindex, the results present a clear and reasonable pattern. The leaders have economies that have a heavy technology component and are major exporters -- Massachusetts, Connecticut, California, Michigan and Arizona. Three others -- Alaska, Texas and Delaware -- reflect a combination of these factors and an additional energy/petrochemical influence. Because most of the data used do not cover the last two years, the collapse of the energy industry is not reflected in the rankings.

The next tier -- the states earning "B's" in competitiveness -- include most of the major industrial states (Ohio, New York, Minnesota, Indiana and New Jersey), and a few more technology and defense-oriented states (Rhode Island, New Hampshire, Maryland, Virginia and Colorado). An examination of results in individual measures shows Florida to be a steady, if not flashy, performer in this subindex.

The bottom ranking states -- South and North Dakota, Montana, Mississippi, Wyoming, Iowa, Nevada, Nebraska, Alabama and even Hawaii -- have several things in common. They tend to have little in the way of industrial development, are poorly diversified, and (with the exception of Hawaii) rely to a significant extent on agriculture. Alabama is additionally hamstrung by a slumped steel sector.

Entrepreneurial Energy Subindex Findings

With only one exception, *all* of the top performers in the Entrepreneurial Energy Subindex are in the West. They have more in common, however, than simply geography. Each of these states -- Colorado, Alaska, Utah, California, New Mexico, Arizona, Idaho, Texas and Oklahoma -- underwent rapid population growth during the period measured, as did the only geographic exception, Florida. In addition, there exists in this region a clear cultural predisposition toward self-employment -- an undeniable legacy of the pioneering spirit, and an indication that the barriers to entry for minority and women entrepreneurs may well be lower in this region than elsewhere in the nation.

The contrast in this regard with the states at the bottom of the list -- Pennsylvania, South and North Carolina, Delaware, Ohio, Rhode Island, Illinois, Mississippi, Alabama, Wisconsin and Michigan -- could not be clearer. All over the map in geographic terms, these states have one thing in common: they are factory states -- automobiles, steel, textiles -- and have been for decades. With a lot of people employed in a handful of large plants within one or two industrial sectors, these economies represent a high degree of vulnerability to change, not an ability to capitalize on change.

Several of the states that score well in this subindex also did well in the competitiveness subindex, suggesting that there can be a stepping-stone relationship between self-employment and business formation and growth. But the link is not universal; in some states, particularly thinly-populated ones, self-employment may well be "the only game in town." That is, while individuals may currently be self-employed, they may never move to the stage of forming and building their own companies and generating significant new growth for the state -- either because they do not choose to do so, or because neither demand nor support systems may exist.

12. This is not to suggest that national and international trends do not have important, sometimes wrenching, effects on state economies. But states have little control over these events, while marshalling their own resources is clearly within their power.

13. See, for example, Catherine Armington, *Further Examination of Recent Employment Growth Analysis of USEEM Data for 1976-1980*, (Washington, D.C.: The Brookings Institution, March 1983); The Rhode Island Strategic Development Commission, *The Greenhouse Compact*, (Providence, RI: The Rhode Island Strategic Development Commission, 1984); and Karl Seidman, "The Role of Taxation in State Business Climate," Literature Review, Economic Climate Project, The Corporation for Enterprise Development, January 1987.

14. See David Birch, "The Job Generation Process," MIT Program on Neighborhood and Regional Change, 1979).

15. See Eva Mueller and James M. Morgan, "Location Decisions of Manufacturers," *American Economic Review* 52 (March 1962); and Harold Wolman, *Components of Employment Change in Local Economies: A Review and Critique of the Literature*, (Washington, D.C.: The Urban Institute, 1979).

16. See The Corporation for Enterprise Development's "Entrepreneurship" literature review.

17. See especially Roger W. Schmenner, *Making Business Location Decisions* (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1982), and the Corporation for Enterprise Development's Economic Climate Project literature reviews: "The Location of High-Tech Industries," "Business Climate and Industrial Location," and "The Location of Services."

18. In a well-developed economy with a strong base, there will tend to be a store of role models, skills, business services, investable capital and confidence which can spur future development. Conversely, in a depressed economy these components of growth will be limited.

19. See, for example, Thomas M. Stanback, Jr., Peter J. Bearse, Thierry J. Noyelle and Robert A. Karasek, *Services: The New Economy* (Totowa, NJ: Allanheld, Osmun & Co., Inc., 1981); and William B. Beyers, Michael Alvine and Erik G. Johnsen, "The Service Economy: Export of Services in the Central Puget Sound Region," Report for the Central Puget Sound Economic Development District, Seattle, WA, April 1985.

20. See U.S. Congress, Office of Technology Assessment, *Technology, Innovation, and Regional Economic Development*, (Washington, D.C.: Government Printing Office, July 1984).

21. Wilbur Thompson and Philip Thompson, "From Industries to Occupations: Rethinking Real Economic Development," *Economic Development Commentary* 9 (Fall 1985).

22. See George Melloan, "Business World," *Wall Street Journal*, 24 February 1987.

23. See Eli Ginzberg and George Vojta, *Beyond Human Scale: The Large Corporation At Risk* (New York: Basic Books, 1985).

24. See both Thomas J. Peters and Robert H. Waterman, Jr., *In Search of Excellence: Lessons from America's Best Run Companies* (New York: Harper & Row, 1982); and William J. Abernathy, Kim B. Clark, Alan M. Kantrow, *Industrial Renaissance: Producing A Competitive Future For America* (New York: Basic Books, 1983).

25. For a sample study of technology adoption rates, see John Rees, "Linking New Production Methods and Regional Growth Rates," *Economic Development Commentary* 10 (Spring 1986). Arthur Young and Company has developed a process and a set of indicators for determining the environment for innovation in larger firms.

26. This measure originally developed by Cognetics, Inc. of Cambridge, MA for *Inc.* magazine. Used with permission of *Inc.* magazine. For additional discussion, see Joseph P. Kahn, "Growing Places: Report on the States," *Inc.*, October 1986.

27. We use entrepreneurship here to denote the formation of new, for-profit firms. But entrepreneurship is better conceived as the process of combining resources in new ways to add value -- a process that can and does occur as well in many large firms, non-profit firms and government institutions. See Peter F. Drucker, *Innovation and Entrepreneurship* (New York: Harper & Row, 1985).

28. U.S. Small Business Administration, *The State of Small Business* (Washington, D.C.: Government Printing Office, 1984, 1985, 1986).

29. U.S. SBA, 1986.

30. Karl H. Vesper, *Entrepreneurship and National Policy* (Chicago: Heller Institute for Small Business Policy Papers, 1983).

31. Candee S. Harris, "The Magnitude of Job Loss From Plant Closings and the Generation of Replacement Jobs: Some Recent Evidence," *The Annals of the American Academy of Political and Social Science*, September 1984. See also Robert Meyer, "Structural Change and Job Dislocation [illegible] unpublished paper, The Brookings Institution, April 1984). While younger and smaller businesses are more likely to fail and close than older, larger firms, these loss rates are often overstated and are, in any case, overshadowed by firm birth and expansion rates. Less than one percent of all businesses fail each year with a loss to creditors. Of these, 80 percent have survived their first two years, with the big failure rates occurring in years three, four and five -- by the end of which period 61 percent of the failures will have occurred. A larger percentage of businesses -- eight to nine percent -- close each year for a variety of reasons, many having little to do with the intrinsic value

of the business, and these too tend to be younger and smaller, though not exclusively so. Kibre Dawit and Robert Friedman, "Myths of Small Business Failure," *The Entrepreneurial Economy* 1 (July 1982).

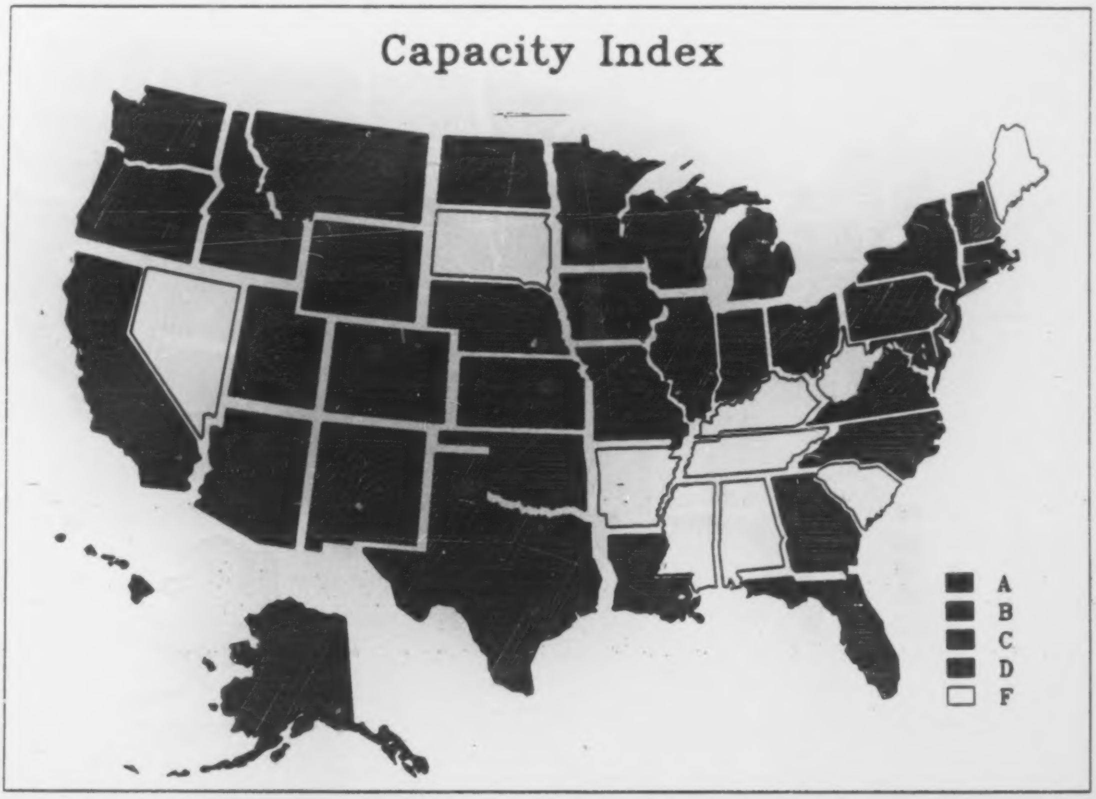
32. See *The State Of Small Business*.

33. See, for example, Eugene P. Foley, "The Negro Businesswoman: In Search of a Tradition," *Daedalus* 95 (Winter 1966); Federico V. Magdalena, "The Filipino Entrepreneurs of Hawaii: An Inquiry Into Their Roots and Success," unpublished doctoral dissertation, University of Hawaii, 1977; Bernard Saracheck, "Jewish American Entrepreneurs," *Journal of Economic History* 40 (June 1980); David Caplovitz, *The Merchants of Harlem* (Beverly Hills, CA: Sage Publications, 1973); and Janice K. Demarest, "Women Minding Their Own Business: A Pilot Study of Independent Business and Professional Women and their Enterprises," unpublished doctoral dissertation, University of Colorado, 1977.

34. A survey of inner city businesses in Buffalo revealed that nearly 100 percent of full-time employees of black-owned firms were blacks, while only 21.5 percent of the employees of white-owned businesses were black. For a review of minorities and enterprise development, see The Corporation for Enterprise Development's *The Entrepreneurial Economy* 3 (April 1984).

35. See Richard L. Stevens, "Measuring Minority Business Formation and Failure," *Review of Black Political Economy* 12 (Spring 1984).

Chapter Four: The Capacity Index



Capacity Index

Capacity Index Report Card

	Human Resources Subindex		Financial Capacity Subindex		Infrastructure Subindex		Amenities Subindex		FINAL GRADE	
	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade
Alabama	45	F	48	F	23	C	49	F	46	F
Alaska	20	B	22	C	4	A	19	B	16	B
Arizona	11	B	11	B	6	A	36	D	9	A
Arkansas	50	F	43	F	26	C	42	F	48	F
California	8	A	4	A	5	A	11	B	3	A
Colorado	6	A	17	B	7	A	21	C	4	A
Connecticut	2	A	6	A	13	B	8	A	2	A
Delaware	9	A	12	B	27	C	5	A	8	A
Florida	38	D	19	B	16	B	23	C	32	D
Georgia	38	D	37	D	13	B	29	C	37	D
Hawaii	19	B	24	C	10	A	8	A	15	B
Idaho	34	D	35	D	7	A	50	F	36	D
Illinois	28	C	3	A	11	B	12	B	14	B
Indiana	32	D	40	D	39	D	32	D	40	D
Iowa	21	C	22	C	27	C	46	F	25	C
Kansas	18	B	13	B	34	D	44	F	21	C
Kentucky	49	F	38	D	30	C	35	D	45	F
Louisiana	43	F	28	C	13	B	43	F	39	D
Maine	40	D	46	F	47	F	33	D	44	F
Maryland	4	A	26	C	45	F	15	B	13	B
Massachusetts	1	A	2	A	19	B	1	A	1	A
Michigan	36	D	20	C	40	D	6	A	35	D
Minnesota	12	B	7	A	17	B	3	A	6	A
Mississippi	48	F	50	F	42	F	46	F	50	F
Missouri	29	C	17	B	50	F	13	B	29	C
Montana	26	C	25	C	12	B	36	D	24	C
Nebraska	31	D	32	D	7	A	41	F	34	D
Nevada	44	F	45	F	2	A	45	F	42	F
New Hampshire	22	C	41	F	24	C	28	C	30	C
New Jersey	15	B	10	A	37	D	3	A	11	B
New Mexico	13	B	35	D	30	C	31	D	22	C
New York	7	A	1	A	43	F	2	A	5	A
North Carolina	37	D	38	D	33	D	16	B	38	D
North Dakota	35	D	20	B	1	A	38	D	27	C
Ohio	24	C	30	C	37	D	19	B	28	C
Oklahoma	32	D	26	C	22	C	25	C	31	D
Oregon	16	B	13	B	36	D	25	C	17	B
Pennsylvania	13	B	9	A	44	F	7	A	12	B
Rhode Island	3	A	5	A	49	F	10	A	7	A
South Carolina	47	F	44	F	40	D	30	C	47	F
South Dakota	42	F	29	C	21	C	40	D	41	F
Tennessee	41	F	42	F	45	F	18	B	43	F
Texas	26	C	8	A	17	B	17	B	18	B
Utah	17	B	47	F	25	C	24	C	26	C
Vermont	5	A	31	D	27	C	14	B	10	A
Virginia	22	C	16	B	35	D	27	C	23	C
Washington	24	C	15	B	20	B	22	C	19	B
West Virginia	46	F	49	F	47	F	34	D	49	F
Wisconsin	10	A	32	D	32	D	38	D	20	B
Wyoming	30	C	34	D	3	A	46	F	33	D

While the performance and business vitality indexes tell us a lot about how a state economy is currently doing, we need to know something about how that economy is likely to do in the future -- that is, its potential ability both to produce in the face of rapid economic change and to generate sustained and widely shared economic opportunities -- before we can adequately characterize its overall attractiveness for economic growth.

The Capacity Index is a measure of two things: the relative availability of the basic resources that feed and support the economy -- an educated and skilled labor force, a range of financial capital resources and well-developed physical infrastructure -- and the aggressiveness with which these "economic nutrients" are being developed and used to strengthen the state economy. These indicators do not predict the future, but they do define the boundaries of the possible -- the potential for economic success and the willingness of states to develop that potential.

Because economic development is a profoundly human process, human resource indicators are crucial to this index. While financial capital, physical infrastructure and raw materials are the building blocks, it takes people to take these building blocks and create the structure of an economy. The more skilled the builders, the stronger and more lasting the structure.

The direct connection between the quality of the basic components of the economy and the likelihood of individual businesses to succeed in that economy has not been lost on the nation's business leaders. Recently, survey after survey has revealed that factors long ignored by traditional business climate indexes -- such as the caliber of the educational system, the level of skill in the workforce, the extent of the technological and entrepreneurial base, the condition of physical infrastructure, the availability of the right kinds of financial capital and the quality and quantity of environmental and cultural amenities -- are the dominant concerns of executives who make business investment and location decisions. Firms are locating where people want to live and businesses are being born where resources exist to support them.[36]

This index, then, measures state capacity to supply current and future development with the capital, physical, amenity, and human resources required for growth. Because of their overarching importance, human resource measures predominate.

Subindex One: Human Resource Capacity

From painful recent experience, business leaders, academic researchers, and government officials have concluded that the key to the challenge of competitiveness in today's global economy is education and its products: a skilled and adaptable workforce, an increasing pool of innovators, and the rapid application of new technologies to the creation of new products, services and production systems. It is increasingly clear that economic development is sharply restricted when skilled labor, a solid research and development base and strong management expertise are lacking.[37]

The human resource capacity subindex explores both levels of educational attainment and how those levels translate into economic development potential. Four indicator categories are used.

■ Labor Force Skills and Educational Quality

The skills of a state's workforce, and the extent to which those skills are adaptable to changing economic circumstances, are the most basic components of its human resource base. The kind of diversified economic activity that will support sustainable growth and better-paying jobs demands a broad range of employment skills: basic reading and computation skills, construction trade skills, industrial skills, engineering expertise, computer knowledge and management skills, among others. There is increasing evidence of a direct relationship between the range and availability of these skills -- along with management's willingness to use them -- and the potential for growth of state economies.[38]

But knowing that the existence of such skills is an important indicator of development capacity and being able to measure them are two different things. Measuring skill levels within and across industries in a state economy, and the extent to which those skills are being utilized, are practically impossible. This subindex measures:

- *College Education Attainment,* the percentage of the adult population age 25 and older with at least a college education; and
- *High School Graduation Rate,* to assess the educational capacity or "preparedness" of the newcomers to the state's workforce.

Finally, this indicator category attempts to illuminate, though indirectly, the *quality* of the state's educational system. Commonly, SAT and ACT scores are used as a measure of quality, but such scores are relevant only for those who take these standard college entrance examinations -- only a part of the overall student population. Moreover, these tests say nothing about those students who drop out before the Junior or Senior year of high school when these tests are normally given. Instead, this indicator category measures:

- *Public Expenditures Per Pupil;*
- *Teacher/Pupil Ratios in Primary and Secondary Schools;* and
- *Net Migration of College Students,* a measure of the attractiveness of the state's institutions of higher education.

Technological Innovation and the Pool of Innovators

Technological innovation is the seed from which businesses and economies grow. It is at the root not simply of "high-tech" businesses but, increasingly, all sectors of the economy. The rapid acceleration of technological innovation has dramatically reshaped the economic landscapes of states -- from the rapid emergence of the computer industry from the ruins of Massachusetts's industrial past, to the revitalization of heavy industry in Michigan and the Midwest -- and it continues to do so.[39]

Technological innovation transforms economies in three ways: by creating entirely new industries when research spawns new products that meet or create market demand; by improving existing products and rejuvenating existing markets; and by changing production processes in ways that lower costs, improve quality, or both, thus making industry more competitive. The more frequently these transformations occur, the stronger the state economy and the greater the growth in direct and indirect employment and income. Moreover, innovation begets innovation. That is, as the pool of innovators and the investments in research and development increase, the number of businesses spawned by or attracted by the innovation grows, reducing the out-migration and increasing the in-migration of workers and technicians and, in the process, generating new applications of the technologies being developed.[40]

This process, called "the agglomeration principle" by many economists, is driven by people -- particularly scientists and engineers -- and by investments in research. Therefore, the measures used in this indicator category include:

- *Scientists and Engineers as a Percent of the Workforce;*
- *Number of Doctoral Degrees in Physical Sciences and Engineering,* a measure of the extensiveness of science training in

the state, not of the number of recipients who stay in the state;

- *Patents Issued Per 1,000 Residents,* a measure of the rate of innovation (though patents are registered by the location of the company headquarters, not the lab where the innovation was developed);

- *University Research and Development Spending;*[41] and

- *Federal Research and Development Spending.*

■ Entrepreneurial Culture

Though difficult to measure with any precision, there is no question that some communities and states have created an environment that stimulates and rewards individual initiative and entrepreneurism, and some have not. Entrepreneurs -- people who initiate, organize and manage new enterprises -- are a particularly important subset of any state's human resource endowment because they are the primary force behind innovation and new business formation and, therefore, new job and wealth creation. The stronger the state's entrepreneurial environment, the more vital and attractive the economy.

- *Entrepreneurial Awareness*

Through a process known as content analysis, it is possible to gain a rough estimate of the importance attached to entrepreneurial activity in a state by measuring the frequency with which it is the subject of articles published about the state. Two content analysis measures are combined in one score in this indicator category: one which measures the proportion of published articles in the nation about entrepreneurship which mention the state; and a second which measures the relative proportion of articles in the nation about the state which mention entrepreneurship.[42]

Subindex Two: Financial Resource Capacity

Financial capital is the means by which new businesses get started and existing businesses expand, retool and stay competitive. In a very real sense, it is the catalyst by which raw materials, energy and labor are converted into products and services, and thus jobs and income.

The relative availability of capital in a state sends a signal to would-be entrepreneurs that their ideas can become businesses in that state, and at the same time provides the wherewithal for businesses already in the state to continue to grow. The more developed the network between bankers, venture capitalists and other financiers, businesspeople and state economic development officials, the healthier and more attractive the environment for growth.

The kind of capital a business requires depends on the stage of development it is in. In its infancy, as ideas are being developed and commercialized, a business needs small amounts of "patient" money -- equity and long-term debt. As it matures and expands it needs larger amounts of equity and debt financing to acquire land, plant and equipment. To stay competitive, it will also need intermediate debt to finance working capital, marketing, equipment changes and replacement, and so forth. And older businesses need long-term debt and equity to finance retooling and, in some cases changes of ownership -- employee takeovers, leveraged buyouts and the like. The unavailability of capital at any of these stages can bring the entire enterprise to a halt.

Capital availability depends on both the underlying capital resources of the state's financial institutions and the aggressiveness with which those institutions invest their resources. And while capital markets are increasingly national, there are still wide variations. Some states have more competitive banking than others. Not all bank services and products are available universally. Formal venture capital still tends to be concentrated in a few states. And the base of capital that can be made available varies from state to state. Consequently, the financial "culture" of states can vary significantly, creating differences in the attractiveness of states for development.

The indicators employed in this financial capacity subindex are of two types:

Capital Resources

Capital resources are those that help describe the basic financial resources available for investment in the state, and includes:

- *Commercial Bank Deposits Per Capita,* a measure of these banks' capacity to support the financial needs of businesses;
- *Dividends, Interest and Rent Income Per Capita,* an indirect measure of the wealth of the state's residents and, therefore, the relative availability of informal sources of investment capital from local investors; and
- *Venture Capital Headquartered in the State.* Recent studies indicate that locally managed funds are often crucial to risk capital availability.

Capital Utilization

This second type of indicator, which helps to measure the utilization of capital, illuminates something about the aggressiveness of financial institutions. Some financial institutions invest in the state's economy; others are more risk averse, preferring "safe" national investments. Some are aggressive in consumer markets, like credit cards, but do little for local businesses. To account for these differences, this category includes:

- *Loans to Equity,* a measure of how aggressively a state's banks are using their equity base for loans; and
- *Commercial and Industrial Loans Per Non-agricultural Employee,* a measure of how a state's banks are using their resources, while adjusting for agriculturally-based economies.

These measures cover a range of financing needs, from risk capital to fixed-asset financing and working capital available from commercial banks. Of course, there are other players in the capital marketplace, but they are not included here for several reasons. Thrift institutions, for example, are now able to provide business loans, but they have been slow to enter the market and are not as yet important sources of business capital. Commercial finance companies, while an increasingly important source of capital for small businesses, are not regulated and little information is available about their impact on a state by state basis. Insurance companies are important sources of capital for large corporations, but they operate on a national or international basis and are thus not relevant in measures of state capacity.[43]

Finally, state governments have recently entered the capital marketplace with their own public or publicly-chartered venture capital and business lending programs, with their own investment policies, or through more strategic regulation of private capital institutions. This increasingly important new source of financial capacity is discussed in Chapter Six.

Subindex Three: Physical Infrastructure Capacity

The capacity of a state's physical infrastructure -- its roads, bridges, airports, water supply and water quality, and sewage collection and treatment systems -- form the foundation of its economy, a foundation upon which all businesses build. Broken water mains, failed treatment systems, collapsed bridges and a pervasive failure of public agencies to invest in the maintenance of these systems led to widespread concern about the nation's "infrastructure crisis"[44] and resulted in new research on the linkages between infrastructure quality and economic vitality. The result? Perhaps not surprisingly, these studies found that well-maintained public infrastructure makes a positive and significant contribution to the output of economies.[45]

States, universities and others have initiated a number of new studies to estimate the costs of refurbishing infrastructure -- rebuilding roads and bridges, upgrading water and sewer systems and the like. But while there is broad agreement that growth potential is directly affected by the quality of these systems, there is little agreement about how to measure their current condition. The indicators used in this subindex do not resolve this problem, but they do point out the differences in infrastructure quality among states.

One caution must be noted. It is possible that in rare instances a high ranking on infrastructure could be a reward for overbuilding. What this subindex is designed to measure, and will measure more completely next year, is whether states have effective capital planning and budgeting programs that incorporate systematic monitoring and evaluation procedures.

- *Transportation System Capacity*

This measure indicates the number of rural, non-interstate roadways which have poor serviceability ratings according to the Federal Highway Administration.

- *Sewage Treatment Plant Capacity*

This measure calculates the dollar amount of unmet sewage treatment plant needs per capita, based on U.S. Environmental Protection Agency data. The availability of excess treatment capacity can be a powerful attractor for new development, but the reverse is also true -- without adequate capacity, existing businesses are constrained and new businesses must seek other sites or invest in their own facilities.

- *Airport Capacity*

For a wide array of high value-added products and services, the availability of a major airport can be a crucial component of growth and, therefore, a key part of a state or community's attractiveness for development. This measure, which counts only flights handled by the Federal Aviation Administration, is an indicator of the level of activity, and thus capacity, of a state's airports. It is not, however, a fail-safe indicator because some airports serve multi-state markets.

Subindex Four: Amenities

Amenity resources are part of the capital stock of every community, state and nation. They are fixed capital assets that, like pieces of equipment, produce goods and services and jobs. Natural resource assets improve the quality of people's lives both indirectly (as in the case of parks and open space) and directly (as in the case of clean air and water). Similarly, other amenity resources -- theaters, museums, art galleries and so forth -- help define an area's quality of life: values that affect the decisions of entrepreneurs about where they will begin their enterprises, help companies retain employees in whom they have invested, make it easier for existing businesses to expand and attract the employees they need, and are becoming powerful attractors for new businesses.

Despite the increasing importance of amenity resources to state economic health and growth potential, few measures -- direct or indirect -- exist by which to compare states. No environmental measures are currently included in this subindex. The measures that are included are indirect at best, but provide a minimal sense of this capacity dimension. They include:

- *Doctors Per Capita*

Amid reports of communities advertising to attract doctors, the number of doctors per capita is clearly a useful, though incomplete, measure of the ability of residents to obtain basic medical care as well as an indirect measure of community well-being.

- *State Arts Agency Appropriations*

A state's commitment to cultural enrichment -- its legislative appropriations for a wide range of arts agencies and organizations -- has a significant effect upon whether people feel "this is a good place to live" and businesspeople feel "this is a good place to build a business." Pride of place is reflected in public art, architectural preservation, downtown revitalization, state or community symphony orchestra and ballet investments, among others, and the effect of these investments is felt well beyond state boundaries. Obviously, not all of the funds for the support of these amenity resources are public (see below), but state governments can set an example for the rest of the community to follow -- and they often do.

- *Distribution of Foundation Grant Funds*

Measuring the distribution of foundation grant funds by state helps to capture not just obvious amenity investments like those described above but also those other charitable, volunteer, and nonprofit activities that create an environment of caring and enrich both communities and the people who live in them -- from the youngest to the oldest. This measure gives us a way of beginning to understand what people mean when they say "there's a lot going on in this state."

Findings

The big story told by the overall Capacity Index findings is that the relationship between a state's economic performance and its development capacity -- particularly the education levels of its population -- is remarkably direct. The states that do well on one index are virtually identical to those that do well in the other. Stated somewhat differently, the states that currently are performing well appear to have the capacity to continue to hold their leads in the future.

The Northeastern states -- with their diversified, technology-enhanced economies, history of high investments in education at all levels, and high levels of wealth ("old money") dominate the top ten. The Northeastern states on the capacity "dean's list" include Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania and Delaware. Only rural and somewhat remote Vermont and Maine fail to make the list. At the southern boundary, Maryland and Virginia are not far behind the leaders. Three other states with similar profiles -- California, Colorado and Minnesota -- also are at or near the top.

The states with the poorest showing in development capacity are, once again, most southern states (Mississippi, Alabama, South and North Carolina, Arkansas, Kentucky, Tennessee, Georgia and Louisiana), several thinly-populated and relatively underdeveloped states (Maine, Nevada, West Virginia, Idaho, Utah and South Dakota) and one major industrial state, Indiana. Indiana would appear an odd candidate for the bottom of this list, given its moderate showing on most other indexes, but it has more in common with the southern states than with its northern industrial neighbors. What cripples Indiana -- and the other states at the bottom of the overall Capacity Index -- is a history of low investments in education and, consequently, low educational attainment levels, low research and development capacity, poor venture capital and lending records -- even in cases where deposits are relatively high -- and run-down infrastructure, all of which are illuminated by the rankings in the subindexes.

Human Resource Capacity Subindex Findings

The Human Resource Capacity Subindex is the driving force in the overall capacity rankings, reflecting the enormous impact measures like educational attainment and research and development levels have on future economic growth. And the leaders of this subindex are fairly predictable: the New England and Mid-Atlantic states, along with the other national economic leaders, California, Colorado, Minnesota and Wisconsin.

But there are some interesting stories hiding in the aggregate totals. For example, a high ranking in high school graduation rates does not imply a workforce that is capable of generating a lot of growth. Instead, states that have high levels of higher educational attainment, along with significant R&D investments, are more likely to see future growth, *even if they have a relatively high percentage of high school dropouts.*

California and Massachusetts, for example, score at the top of the overall index, even though they score poorly in high school graduation rates. The high achievers in these economies offset the drag caused by those who fail to complete high school. There are limits to this rule, however: several large industrial states (Michigan, Ohio and Illinois, for example) do not overcome the negative effects of high numbers of disadvantaged people with inadequate schooling, and their capacity rankings show it. Another story, perhaps less surprising, is that there is a high correlation between high school graduation rates and pupil/-teacher ratios: the more teachers, the more graduates.

Rankings in the human capacity index also reflect the R&D listings, and there are no surprises here either. The leading technology states, particularly New England, top these measures while the South dominates the bottom.

Financial Resource Capacity Subindex Findings

The Financial Resource Subindex proves the old rule: "It takes money to make money." The leading states in this subindex either hold a lot of "old money" (New York, Massachusetts, Illinois, Connecticut, Pennsylvania and New Jersey, for example) or have generated a lot of "new money" (California, Texas). But also near the top are several states that are not especially wealthy but use aggressively whatever capital they have (Arizona, Oregon and Kansas, among others).

Conversely, the states at or near the bottom of the Financial Resource Capacity Subindex either have a history of poverty and therefore limited investable capital (predominantly the South), or lack aggressive lending institutions and venture capital funds (Indiana, for example).

Infrastructure Capacity Subindex Findings

The top end of the Infrastructure Capacity Subindex says less about responsible infrastructure investment than it does about how long ago the leading states were settled. For the most part, the leaders in this index are relatively young, thinly populated, western states -- North Dakota, Nevada, Wyoming, and so forth. The second tier of states, those ranking between 10 and 20, include a number of states that possess airports that are "hubs" for major airlines, thus generating high airport use and, in association, high levels of air-related development activity.

The bottom of the list is dominated by older industrial states which have only just begun to address the development constraints caused by deteriorated public infrastructure (New York, Pennsylvania, Michigan, Indiana, Ohio, New Jersey and others), plus a second group of states that, while older in comparison to the western states that lead this subindex, are nevertheless still relatively underdeveloped in terms of infrastructure -- Missouri, Maine, West Virginia and several southern states.

Amenity Subindex Findings

The Amenity Subindex, as noted above, lacks important measures -- particularly of environmental quality -- and is given minimal weight in the overall capacity ranking. And yet it *does* present some useful findings.

The leading states in this subindex tend to be older industrial states in the Northeast and Great Lakes regions -- states with a lot of private and corporate foundations with substantial financial commitments to their communities. As a consequence these states score high on both the foundations measure and on the arts appropriations measure (in large part because many foundation grants require a public match). These same states also tend to be the ones with major hospitals and medical centers, increasing the proportion of doctors in the population. Had environmental measures been available, the positions of these states may have dropped somewhat, but while these states tend to have significant environmental problems, they also tend to be the ones doing the most about them.

Bringing up the rear of this subindex once again were southern states and the thinly--populated Great Plains and Mountain West states (Wyoming, Nevada, South and North Dakota, Nebraska and Montana). In the case of this latter group, inclusion of environmental measures might well have altered the results.

36. See, for example, Roger W. Schmenner, *Making Business Location Decisions* (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1982); Michael Kieschnick, *Taxes And Growth: Business Incentives and Economic Development* (Washington, D.C.: Council of State Planning Agencies, 1981); Takeshi Nakabayashi, "A Survey on Location Decisions of Japanese Companies in the U.S.," unpublished paper for Mt. Auburn Associates, March 1987.

37. See Edward Malecki, "Technology and Regional Development: A Survey," *International Regional Science Review* 8 (1983); and Edward F. Denison, *Trends In American Economic Growth, 1929-1982* (Washington, D.C.: The Brookings Institution, 1985).

38. U.S. Congress, Joint Economic Committee, "Location of High Tech Firms And Regional Economic Development," 1 June 1982.

39. Edward Malecki, "Public and Private Sector Interrelationships, Technology Change, and Regional Development," Papers of the Regional Science Association 47, 1981.

40. U.S. Congress, Office of Technology Assessment, *Technology Innovation and Regional Economic Development* (Washington, D.C.: Government Printing Office, July 1984); and U.S. Congress, Congressional Budget Office, "The Productivity Problem: Alternatives For Action," A CBO Study, January 1981.

41. Private research spending, though a critical measure, is often proprietary and therefore unavailable.

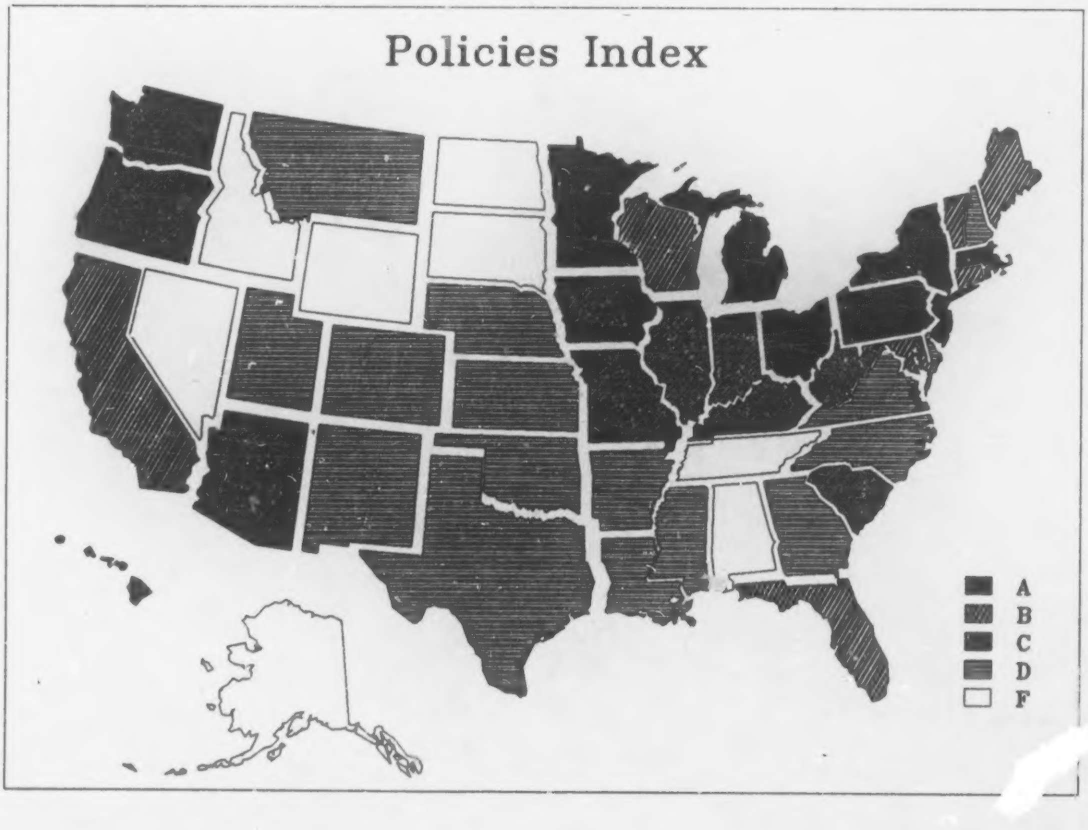
42. There tends to be a high correlation between this measure and states with a lot of "high tech" economic activity, making this a somewhat imprecise measure of overall entrepreneurship.

43. The Massachusetts Capital Resources Company, a publicly-chartered, privately-owned and managed consortium of nine Massachusetts-based life insurance companies, with more than $125 million of investment capital invested in small and mid-sized in-state businesses, is a major exception to this rule.

44. See Pat Choate and Susan Walter, *America In Ruins* (Washington, D.C.: Council of State Planning Agencies, 1981).

45. See Randall W. Eberts, "Estimating the Contribution of Urban Public Infrastructure to Regional Growth," Working Paper 8610, Federal Reserve Bank of Cleveland, December 1986.

Chapter Five: The Policies Index


Policies Index
A
B
C
D
F

Policy Index Report Card

	Ranking	Grade
Alabama	44	F
Alaska	49	F
Arizona	24	C
Arkansas	30	D
California	8	B
Colorado	30	D
Connecticut	12	B
Delaware	30	D
Florida	13	B
Georgia	30	D
Hawaii	23	C
Idaho	44	F
Illinois	15	C
Indiana	24	C
Iowa	15	C
Kansas	30	D
Kentucky	15	C
Louisiana	30	D
Maine	10	B
Maryland	10	B
Massachusetts	6	A
Michigan	1	A
Minnesota	3	A
Mississippi	30	D
Missouri	15	C
Montana	30	D
Nebraska	30	D
Nevada	44	F
New Hampshire	42	D
New Jersey	7	A
New Mexico	27	D
New York	3	A
North Carolina	30	D
North Dakota	47	F
Ohio	2	A
Oklahoma	30	D
Oregon	15	C
Pennsylvania	3	A
Rhode Island	24	C
South Carolina	15	C
South Dakota	43	F
Tennessee	49	F
Texas	27	D
Utah	30	D
Vermont	13	B
Virginia	27	D
Washington	15	C
West Virginia	15	C
Wisconsin	8	B
Wyoming	47	F

One of the great ironies imbedded in the traditional definition of "business climate" is that its proponents -- those who would rate a state on the basis of the number and size of the financial and other "sweeteners" it is willing to hand out to attract industry -- are often the same people who argue that government ought to "get out of the way" of business.

Today, however, rapid changes in the domestic and global economic environment have rendered this quaint contradiction an artifact of the past. The stark realities of international competition and the dramatic shift in governmental responsibilities brought about by the Reagan Administration's "New Federalism" have made state governments principal players on the nation's economic stage.

In response, there has been a quiet revolution in state economic development policymaking.[46] State agencies that only a few years ago did little more in the way of economic development than "smokestack chasing" -- trying to lure manufacturing plants away from other states -- today wield a comprehensive box of policy tools by which to spur entrepreneurship, help improve the skills and adaptability of workers, speed technological innovation and strengthen the competitiveness of "home-grown" businesses and industries and the communities in which they are located. These policy tools, often developed cooperatively with industry, include tax and regulatory reform, development finance programs, domestic and international market development, state-funded research and development, revitalized education and training programs, new labor-management experiments and long-term infrastructure investments. They reflect the new roles of state government described earlier in Chapter Two -- as broker, catalyst, investor, regulator and stabilizer.

These policies and programs are linked by common themes:

- They are *market perfecting*, recognizing both the power and effectiveness of private markets as well as their limitations, and designed to remedy market failures that keep economic opportunities from expanding and being shared by all.

- They are *investment oriented*, assuring that resources are invested now so that the foundations for growth are in place in the future.

- They are *people centered*, based on a new understanding that the central dynamic in a changing economy is people with ideas about how to do something better.

- They are shaped by *public-private cooperation*, by leaders who recognize that we live in one economy -- part public, part private -- which has become so complex that success can only be assured by joint action.

- They *cross political lines*, and are being pursued by both Republican and Democratic, liberal and conservative state policymakers.

The number of individual initiatives undertaken by states in just the past few years is high. Evaluating their effectiveness is complicated by a general lack of consistent cost data and the difficulty of establishing direct links between cause and effect. Moreover, none of these initiatives alone is capable of thrusting a state into the forefront of prosperity. Instead, they act at the margin, gradually improving the competitive position of the state.

While it is clearly impossible to "rate" each initiative, given the very different economic circumstances in each state, our simple yes/no tally provides a useful measure of the relative commitment of different state governments to improving the overall environment for business growth. What we measure is level of effort, not necessarily quality of effort.

Seven broad categories, or subindexes, of initiatives have been used. While states were canvassed for several of these subindexes, this index also relies (to a greater extent than earlier indexes) upon information surveys conducted by other reputable organizations and institutions.[47] Even these conscientious surveys may miss some initiatives — especially newer ones or those which are carried out primarily by private actors with state support. The seven Policies subindexes are:

1. Improving Governance and Regulation;
2. Creating an Equitable and Efficient Tax Code;
3. Mobilizing Capital;
4. Enhancing Technology and Business Development;
5. Building and Maintaining Public Works;
6. Investing in Human Resources; and
7. Helping Distressed Communities.

An eighth subindex, "Investing in Natural Resources," designed to illuminate a state's quality of life -- an increasingly important business development factor -- is still being developed and will be added next year.

The process of deciding whether a given state initiative should be included was guided by several key questions: Can the initiative have a significant impact on the state's economy? Is the initiative targeted at an important barrier to or opportunity for growth? Given the limits of state resources and the need for partnerships with private actors, did the initiative leverage significant private investment? Is it likely to enhance the equitable distribution of economic opportunity? Is it readily implementable? Does it reduce barriers to growth? Does it empower communities and individuals to improve their own economic condition? Is it politically pragmatic and administratively feasible?[48]

Subindex One: Improving Governance and Regulation

If state governments are to be full partners in the development process, the quality of public sector analysis, decisionmaking and management must be as good as the best in the private sector.

As states wrestle with complex economic challenges from functional illiteracy to plant closings, from youth unemployment to the development of new international markets, governance that is more efficient, more farsighted, and more strategic in approach has become increasingly important. Indeed, better governance has been part of the formula for many of the states that have recently shown impressive economic gains. Five indicators can be used to help measure the extent to which a state is trying to improve governance, particularly with reference to economic development: (1) the capacity to scan the economic horizon and analyze emerging problems and opportunities likely to affect the state's development objectives; (2) the conduct of a strategic audit of the state's development liabilities and advantages; (3) review and reform of regulations; (4) creation of an institutional mechanism for collecting and analyzing economic information, designing public strategies, and coordinating multi-agency responses; and (5) instituting mechanisms for monitoring, evaluating, reforming, and terminating economic development programs.[49]

- *Improving Government Foresight*

The Council of State Policy and Planning Agencies, of which virtually all states are members, has developed a *State Scanning Network* designed to identify and assess emerging trends of concern to states. Currently nine states (Colorado, Florida, Minnesota, Missouri, Nebraska, New Jersey, North Dakota, Oklahoma and Pennsylvania) participate. Staff in each state review hundreds of information sources for emerging issues. The results of these state scans, augmented by scans conducted by private corporations which are also members of the Network, are reviewed every second month by a distinguished National Scanning Board, which selects the most significant issues and prepares a summary "Report To The Governors." Scanning Board staff then assemble a data base to track each issue, creating a reference bibliography, a list of experts on the issue and, where applicable, examples of successful intervention. The data base is immediately accessible to participating Governors' offices.

The *State Scanning Network* is the only public sector "early warning" system of its kind, and one of only a few so comprehensive in the private sector. States which are members are afforded a powerful system for identifying, anticipating, and addressing in a timely manner a wide array of economic problems and opportunities. Those states possessing this capability have a substantially greater governance capacity than those which do not.[50]

- *Conducting Strategic Audits*

A variety of tangible barriers to economic development -- capital, management, labor, technology, markets and taxation -- are either determined by, or capable of being influenced by, public action. If these barriers can be lowered, opportunities for entrepreneurship and business growth can be enhanced, increasing employment, innovation, and many other components of economic vitality. State governments that undertake a careful audit of these potential barriers -- and several leading states have done so -- advance their development prospects in two ways: they understand and can directly address the stumbling blocks to growth, and they more clearly understand their own comparative advantages in the competition for growth.

- *Regulatory Review and Reform*

State regulation of the private marketplace is an economic fact of life. Regulations exist to protect the health, safety, and economic welfare of a state's residents from the flaws in efficiency and equity inherent in the normal operation of the private market economy and from the occasional abuses of the private market economy and the public trust by the unscrupulous.

But, built up as they are layer by layer, year by year, many regulations are no longer relevant to current situations. Many are poorly and unevenly administered, resulting in uncertainty and costly delays. Many are duplicative, even contradictory. Some have more to do with the distribution of political interests than of social or economic concern.

Increasingly -- and particularly as the overall quality of life in a state or community becomes a more and more important business location factor -- businesspeople are concerned less about the *fact* of regulation than about the *administration* of regulation. Regulatory review and reform -- not to be confused with regulatory "relief" -- have become significant elements of state economic development programs. States have undertaken comprehensive regulatory reform studies, established "one--stop" permitting offices to which businesses can come for guidance and assistance, streamlined permit applications and related paperwork, guaranteed review and decision timetables, ensured that permit costs cover administrative expenses so that permittees are assured reliable and timely decisions and created ombudsman's offices to handle questions and complaints.

One of the most positive outcomes of regulatory reviews, (and this has been the case in a number of reviews of workers' compensation regulations) is their ability to separate myth from reality. The process of information gathering, analysis, discussion, and decision, particularly when these reviews are conducted by special study commissions composed of key constituencies, can diffuse long-standing feuds and significantly improve cooperation, support and trust between businesspeople and government officials.[51]

The objective of these activities, and the purpose of this subindex, is to indicate clearly the regulatory concerns of the state and assure businesses a fair and equitable process for reviewing and approving their development proposals -- in short, minimizing pain and uncertainty and cementing the partnership relationship between private and public actors in the economy.

As a proxy for regulatory review and reform, this indicator simply identifies whether a state has established a one-stop permitting system.

- *Creating A Development Cabinet*

State governments, like most private corporations, are organized along functional lines, with separate line agencies responsible for specific purposes -- education, commerce, natural resources and so forth. But economic development has no respect for agency responsibilities. Because they so often cross agency lines or "fall through the cracks," many development opportunities are missed and many problems go unrecognized, until they become crises. Moreover, in the tradition of all bureaucracies, public and private, timely action is often frustrated by turf squabbles and by endlessly fighting the last war instead of anticipating the next one.

To short-circuit these problems, several states have established economic development cabinets or sub-cabinets, often with independent staffs, to anticipate cross-cutting issues or opportunities, collect and analyze information, develop strategies and coordinate comprehensive, multi-agency responses to development issues. States possessing this institutional capability present more coherent responses to the challenge of competitiveness than those that do not and, as a consequence, tend to have more vital economies.[52]

- *Improving Oversight*

Perhaps the most positive effect of the shift of responsibility for many economic policymaking responsibilities from the federal government to the states is the rapid increase in the professional analytic capabilities of state legislatures. A key new function is the legislative audit, by which legislative staff monitor the performance of agencies carrying out legislatively mandated programs to assure that they stay on track, are cost-effective, and remain relevant. Important improvements have been made in oversight and accountability and in review and evaluation. The process works on two levels. At the program level, auditors monitor the effectiveness of specific initiatives: Is the seed capital fund meeting its intended objectives and recycling its funds? Is the incubator facility effectively overcoming the space difficulties faced by fledgling companies? At the strategic level, auditors address broader questions: What market barriers hinder development and are amenable to state action? Is a given program effective but in need of being supplemented? Are some initiatives so successful that next steps need to be mapped out? Or has a program done its job so well that it is time for it to be terminated?

States whose legislatures have developed a professional analytic staff with defined audit responsibilities are more aware of the effectiveness of the existing investments in economic development and, as a consequence, are more sensitive to the effects on the business community of state actions and quicker off the starting blocks with new initiatives when a need is identified.

Subindex Two: Creating An Effective And Equitable Tax Code

A great deal of recent research has shown that, despite the tendency of governments to use tax abatements and incentives to lure new business, state and local taxes have very little effect on business development. Three-quarters of new jobs come from in-state businesses that do not even shop among states. Even for that minority that does, taxes have been shown to have little impact on the profitability of businesses and receive little consideration in business location decisions. Other location factors, such as proximity to markets and quality of life for employees, are more important according to business executives and frequently overwhelm whatever advantages may be created by tax differentials.

But that doesn't mean that state taxes and fiscal policies don't affect the economic climate for business in the state. Stable and attractive conditions for enterprise development depend to a significant extent on the establishment of effective, efficiently administered and equitable tax policies that further:

- Fiscal stability and balance. Use a balance of different taxes to create stable revenue base, which can support a consistent level of public services and investment;
- Tax Fairness. Treat taxpayers fairly and are minimally regressive; and
- Fiscal Equalization. Assure that communities have relatively equal ability to deliver essential services.

- *Tax Climate.* The tax subindex calculates a total score, taking into account measures of each of these three indicators.[53]

Subindex Three: Mobilizing Capital

Financial capital is the "grease" that keeps economic machinery turning smoothly. When capital does not flow to its most productive uses, for whatever reason, the machinery slows: jobs are not created, new technologies are not developed and commercialized, the higher economic returns delivered by new or expanding enterprises do not occur, and the economic health of communities and states suffers.

Existing financial institutions -- commercial banks, insurance companies, venture capitalists, investment bankers, and others -- do a pretty good job of assuring the availability of capital for large, established corporations. But an increasing body of evidence indicates that these institutions fail to provide appropriate kinds and amounts of capital to the very enterprises that create the majority of the new jobs and economic energy in today's economy: new and young businesses, rapidly expanding businesses, businesses in new economic sectors, businesses located in depressed communities, minority or women-owned businesses, and businesses with non-traditional management structures -- cooperatives, worker-owned firms, non-profits and community development corporations.[54]

The reasons for the unavailability of capital for such enterprises are many. An unwillingness or inability to diversify risk makes some capital sources risk averse. The difficulty and cost of acquiring adequate information on new, young or small firms discourages such investments. The cost of putting deals together can make a few large deals more profitable than many small ones. Political, geographic, racial and sex biases exists. And public regulatory and taxation policies -- "legal list" requirements, barriers to risk pooling, usury ceilings and the like -- may simply prohibit existing institutions from making capital available to some enterprises, regardless of their soundness and future growth prospects.

But sheer availability is not the only problem. The *kinds* of capital -- long-term debt, short-term debt, subordinated debt, equity, near-equity and others -- are also often inadequate. A firm needs different kinds of capital at each stage of its life -- research, product design and development, startup, expansion and so forth. If capital is generally available, but not in the right form, it might just as well be unavailable.

To overcome the limitations on economic development caused by capital market failures, state governments have developed a variety of financial innovations. This subindex gathers these innovations into three categories: (1) changing state financial regulations to redirect the investments of private financial institutions, (2) providing loan guarantees and other risk insuring mechanisms, and (3) creating new public or publicly-chartered financial institutions to fill gaps in the private capital marketplace. The mix of tools varies with the economic conditions that apply in each state. For example, a state with unit banking, an agriculturally-based economy, and no indigenous venture capital industry will have different needs than one which is highly-urbanized, has a substantial venture capital industry, and needs to revitalize depressed communities.

Reforming Finance Regulations

Four of the five trillion dollars in the U.S. economy are controlled by financial institutions that are licensed and regulated by government -- banks, savings and loans, insurance companies and pensions funds. As a consequence, any effort to enhance the attractiveness of the state's economy for business development that fails to address the investment practices of these institutions will be marginal. By the same token, any policy that makes even a small change in the investment practices of these institutions will have a dramatic effect on the availability of capital to businesses in that economy.

These regulatory reforms are among the most direct ways that state governments can improve the capital environment -- and thus the health and attractiveness -- of their economies. This category examines specifically whether state law permits interstate banking and pension fund investment in venture capital and whether states have their own versions of the Community Reinvestment Act of 1977.

Statewide Branch Banking

A variety of state policies can limit the availability of capital from these institutions. Regulations that prevent the entry of new banks into a community, for example, limit competition and the kind of aggressive lending practices that competition stimulates. Many states have lifted intra- and interstate banking restrictions recently to overcome this problem.

Community Reinvestment Act

In addition, some states have enacted their own versions of the federal Community Reinvestment Act of 1977 in an effort to ensure that banks meet the credit needs of the businesses in the communities in which they are chartered. The Massachusetts version, for example, requires them to demonstrate that they serve the convenience and needs of the community and its businesses not just for deposit services but credit services as well.

Pension Funds

State and local regulation of public pension funds (which in fifteen years will total more than a trillion dollars) often restrict or prohibit investment in the very communities in which fund contributors live. In some cases statutory lists specify where pension funds can be invested. To free at least some of these resources, while protecting the integrity of the funds, many states have either eliminated the lists altogether, substituting the "prudent investor" language in the federal Employee Retirement Income Security Act (which governs private pension fund investment practices) that would permit investing a portion of fund assets in qualifying in-state businesses. Others have modified the lists to permit some in-state investments in corporate equities, small businesses, SBA loans, limited partnerships with venture capitalists and affordable housing.

Insuring Against Risk

Guarantees

When their economic development objectives are frustrated by the private financial community's perception of risk, many states have responded recently by offering to absorb some or all of that risk, thus enhancing creditability. Using loan guarantees, credit insurance, and secondary markets, among other devices, to eliminate the risk exposure of private investors in the (usually very unlikely) event of default, the state is able to achieve its public objectives with private money. Many states have established one or more such guarantee programs to spur private investments in everything from housing developments to beginning farmers. To the extent that such programs increase the availability and accessibility of capital for indigenous businesses, at minimal state cost, the state's ability to support new development is substantially enhanced.

- **Creating New Institutions**

When all else fails, states have created public, or publicly-chartered private, institutions to channel capital to businesses or communities that private financial institutions have failed to serve. Some of these institutions are capitalized by state appropriations, some by private investors who are offered some special incentive (like a tax credit), and some by leveraging both federal and private funds.

While the forms these institutions have taken, and the track records of their investments, have varied, the best of them have (1) supplemented rather than substituted for private markets, targeting their limited resources to clearly-identified capital market gaps; (2) increased the accessibility of capital to businesses, rather than subsidizing its cost; (3) provided the kinds of capital (e.g. equity, long-term debt) that private capital sources have failed to provide to new, young, and small businesses; (4) leveraged a great deal of private money with a small amount of state money; and (5) demonstrated the economic viability of enterprises that private markets found too risky, eventually shifting future financing of such enterprises to private institutions.

Such institutions not only improve the chances for new and existing businesses to thrive in the states that have established them, but they also send a signal loud and clear that the state is prepared to ensure that capital is equitably distributed to qualifying enterprises, and to create the financial environment necessary to ensure the successful long-term growth of its businesses.

A wide range of institutions have been created, including:

- *Quasi-Publics.* May include publicly capitalized venture capital corporations;

- *Business Development Corporations.* BDCs are publicly chartered and privately managed.

- *Loan Funds.* Governmental lending programs.

- *Business and Industrial Development Corporations.* (BIDCOs)

Subindex Four: Enhancing Technology And Business Development

As state officials recognize the importance of technological innovation, entrepreneurship, and effective business management in economic growth, they have taken a variety of steps to create the conditions under which these components of growth can develop. Where states have attempted by these efforts to duplicate the formula for growth that has worked somewhere else (like California's Silicon Valley) these efforts have wasted large quantities of scarce public funds. However, where states have used these efforts to strengthen their own comparative economic advantage (as in the case of Michigan's machine vision or robotics industries), important progress has been made in improving the vitality of the state's economy.

Most of the initiatives undertaken to date fall into one of four categories: (1) creating new research and development centers, (2) creating technology transfer centers, (3) establishing small business development centers, and (4) creating small business incubator facilities.

- *Creating Research and Development Centers*

The link between first-class university research and the creation of "cutting edge" businesses has been made abundantly clear by recent research.[55] Consequently, a number of states have moved to finance the creation of advanced technology centers -- like Pennsylvania's Ben Franklin Partnership and Ohio's Thomas Alva Edison program -- to build on existing comparative advantages. Often the funds appropriated to build such centers, support research, endow faculty chairs or provide graduate student fellowships, have required matching private sector investments.[56] For businesses already pursuing related lines of research, and for entrepreneurs capable of using such centers as springboards for the development of new products or processes, such state investments present opportunities for tangible, if long-term, economic growth. Moreover, given the importance of the rapid development and commercialization of technology to gaining and keeping a competitive edge in today's economy, such investments may be crucial to assuring future economic opportunity.

- *Establishing Technology Transfer Programs*

Several creative states have established new technology transfer programs designed to identify promising new university research and move it toward commercialization, solve technology-related problems of corporate clients, and help existing industries become more competitive through retooling. (Because these programs, as well as the research and development centers noted above, are still quite new, this subindex simply identifies their existence; it does not attempt to evaluate them at this stage.)

- *Establishing Small Business Development Centers*

For would-be entrepreneurs and for small businesspeople who want to expand, frequently the biggest stumbling block is simply not knowing where to start. To remedy this problem, many states, in cooperation with the U.S. Small Business Administration, have established small business development centers to provide business creation and management assistance and increase the state's "entrepreneurial yield." As the evidence continues to grow that virtually all the net new jobs in any state economy are created by businesses and entrepreneurs already living in the state, the value of these centers for strengthening the state's economic future continues to grow as well.

- *Creating Small Business Incubators*

The idea behind the many small business incubator facilities that recently have been established is that the likelihood of success of new small businesses can be increased by helping them overcome common barriers: poorly developed management skills, the absence of business support infrastructure, the shortage of accessible, appropriately sized and affordable industrial and commercial space, and the unavailability of risk capital.

Such facilities, which may be established and run by a state or simply assisted by it, provide the facilities and services most commonly lacking in new businesses: parking, security, cleaning, telephone switchboard, reception, meeting rooms and, in some specialized examples, testing facilities. The state may build, donate or underwrite the development of the facility, absorb some operating costs, and even offer seed capital and other forms of startup financing. The exact mix of facilities and services varies from incubator to incubator, depending on its purpose. But as with the other indicators in this subindex,the overarching purpose is to increase the success rate of new businesses and, in the process, increase the vitality of the state's economy overall.

Subindex Five: Building and Maintaining Public Works

One of the great ironies of today's economy is that the public works infrastructure -- roads, bridges, water and wastewater systems, solid waste systems, public buildings, dams and prisons -- is deteriorating just as businesspeople have begun to identify these same facilities as crucial to their location and development decisions, and thus crucial to the economic future of the state.[57]

- *Capital Budget*

Federal funds for such facilities -- funds which have always tended to emphasize new construction over repair and maintenance --

are drying up, and the burden for the upkeep of these facilities and services, the foundation of the economy, is shifting to state and local governments. While most states continue in the age-old practice of cutting repair and maintenance investments every time there is an annual budget crunch, a few leading states have conducted infrastructure investment need surveys and developed specific capital budgets to ensure that these investments are made. While the existence of a capital budget does not guarantee adequate investment in public infrastructure, it at least removes the issue from annual operating budget squabbles and introduces a degree of commitment in support of long-term economic stability and growth that states lacking capital budgets cannot claim.[58] We therefore measure whether or not states use a capital budget.

Subindex Six: Investing in Human Resources

In response to the increased national awareness of the direct link between international economic competitiveness and investments in the education and skill levels of the workforce, states have undertaken a range of new initiatives aimed at (1) strengthening public education and the preparedness of the next generation, (2) increasing the skills and productivity of labor and management in the current generation, and (3) restructuring transfer payment programs -- income maintenance and job training, for example -- to enhance the employability of those bypassed or sidetracked by a changing economy. This subindex examines state initiatives in each of these categories.

■ Strengthening Public Education

At the most basic level, strengthening public education means strengthening teachers. And even before several national studies highlighted the need for public education systems to be upgraded, a number of states had already begun implementing new programs to address that need. Across-the-board pay increases for teachers have been instituted, to reflect their importance to the state's economic future. New in-service training programs have been initiated. New career ladders have been established to increase opportunities for mobility. New (and still controversial) evaluation systems have been developed. Performance-based pay increases have been established.

In addition, the rigor of the educational experience is being toughened. High school graduation standards have been stiffened. And a number of districts are experimenting with longer school days and even year-round schooling.

These measures are costly. It has been estimated, for example, that raising teachers' salaries nationwide by 20 percent would cost some $12 billion. But public officials and taxpayers have signalled their willingness, even determination, to make such investments to reverse what is perceived to be a marked decline in the quality of public education and, by extension, the ability of the next generation of workers, managers and entrepreneurs to compete successfully. This subindex measures but a few of these initiatives:

- *High School Graduation Standards;*
- *Teacher Career Ladder Plans;*
- *Entrance Testing Certification for Teachers;*
- *Computer Literacy;* and
- *High School Graduation Testing.*

■ Labor-Management Improvement Assistance

Increasing labor productivity, overcoming skill shortages, increasing the flexibility and adaptability of worker skills and strengthening the ability of managers to identify and fully utilize the talents of their employees are crucial to increasing the competitiveness of the economy. Several states have taken steps to assist in the restructuring of labor-management relationships.

- *Labor-Management Assistance Programs*

While the range of such activities is broad, the most direct and potentially most effective initiative has been the creation of offices within state government dedicated to business-labor outreach and education programs, providing small seed grants for labor-management improvement programs and local labor-management councils, trouble-shooting and providing direct staff assistance, sponsoring conferences and seminars and acting as clearinghouses for information on labor management productivity and quality of worklife improvements. This indicator identifies the states which have established such programs.

■ Transfer Payment Investment

Traditional business climate definitions regard transfer payments -- welfare, unemployment compensation, social security and medicaid -- as drags on the economy. In fact, however, such payments stabilize the economy by maintaining purchasing power, conserving human capital, maintaining basic standards of living and income for those dependent upon them and -- particularly in rapidly changing economies -- reducing resistance to productive change. Transfer payments can, however, be even more effective contributors to economic development if, instead of penalizing recipients for moving on to self-sufficiency (as they now often do) they are used to encourage and support training, education, employment and self--employment.

- *Transfer Payment Investment Efforts*

In this subindex we assess state efforts to reform the current basic welfare (AFDC) system[59] to promote economic independence, as a proxy for comprehensive transfer payment investment.[60] Included are: state commitment to the JTPA Title II-A Job Training Program; state support for the child care and medical coverage needs of reemployed AFDC clients; state AFDC grant diversion programs designed to turn income maintenance payments into hiring incentives; state commitment to innovation, measured by participation in optional welfare reform demonstration projects under Sections 1115 or 445 of the Social Security Act; and state AFDC benefit levels.

Subindex Seven: Helping Distressed Communities

When it comes to the distribution of the benefits of economic development, all communities are not created equal. A state undergoing steady economic growth may nevertheless have communities hard hit by plant shutdowns. A mature industry in the throes of retooling to become competitive again may generate significant short-term, and even long-term, unemployment. Some communities are simply locked in chronic poverty and are consistently bypassed by economic development. If the broad purpose of economic development is to provide everyone an opportunity for a better life, and if the attractiveness of a state for new economic development is determined in large part by the extent to which it is capable of providing that opportunity, then states that work to help these distressed communities will be more vital and more attractive for future growth than those that do not.

While the specific programs needed to address the problems of chronically distressed communities will differ from case to case, five types of policies serve as useful indicators of a state's commitment: (1) supporting community economic development programs, (2) creating minority enterprise programs, (3) investing transfer payments in economic development, (4) expanding employee ownership, and (5) establishing rapid response teams to address plant closings and related dislocations.

Supporting Community-Based Development

Community-based organizations can play a key role in delivering a wide range of services critical to the revitalization of economically--distressed communities: loan packaging, fund-raising, development planning, providing technical assistance to small businesses, developing and managing incubators, sponsoring real estate development projects, developing social service enterprises and investing directly in small firms, among others. While no single community organization can undertake all these initiatives, several such organizations can effectively catalyze community economic renewal and stimulate widespread local participation.

Three general types of public support increase the effectiveness of community revitalization programs: (1) a Community Enterprise Economic Development (CEED) program, which provides small grants for community economic development corporations, pre-venture startup costs and general administration expenses; (2) a Community Economic Development Assistance Corporation (CEDAC) which provides training and more sophisticated project assistance to community development corporations; and (3) a Community Development Finance Corporation (CDFC), a wholly state-owned venture capital firm targeted specifically to finance community development corporation ventures. Few states provide such comprehensive support. But even providing limited grant and technical assistance can increase the ability of communities to rebuild and, in so doing, enhance the overall health of the state economy.

Creating Minority Enterprise Programs

Increasing conventional for-profit entrepreneurship in distressed communities is an excellent way for providing economic opportunity to individuals long out of the economic mainstream, while at the same time decreasing the attractiveness of the underground economy. Most self-employment and entrepreneurship arises out of economic and personal dissatisfaction, but there are significant barriers to low-income enterprise development that frustrate the widespread development of entrepreneurship in distressed communities. Focused state programs to unleash the promise of minority entrepreneurship -- by increasing access to seed capital from either public or private sources, providing management training and technical assistance and contracting for state procurement -- can go a long way toward generating economic energy in distressed communities.

Expanding Employee Ownership

In communities threatened by the closing of a plant that no longer fits its corporate owners' strategic plan but is otherwise a going concern, employee ownership and operation can be an economic lifeline.[61] Besides preserving jobs, such ownership tends to improve productivity, provide income beyond wages and enhance local control over economic development.

Six states have established comprehensive employee ownership assistance programs providing technical assistance, establishing education programs to prepare employees for ownership and management responsibilities, and providing loans, loan guarantees and tax incentives that can make such ownership programs possible.

In much the same way that state programs to support indigenous businesses strengthen the overall economic vitality of the state, employee ownership programs, where applicable, strengthen the economic viability of communities that depend upon threatened businesses. They keep such communities from becoming distressed in the first place.

Establishing Rapid Response Teams

When a major plant is closing and employee ownership is not an option, communities face rapidly escalating service demands in the face of a sharp drop in tax revenue from the closing plant. State-sponsored rapid response teams can lessen the toll on workers, their families, other businesses and the community as a whole. The ultimate purpose of such teams is to smooth, to the extent possible, the inevitable bumps encountered by people and communities in an economy that is undergoing rapid change. States that have such programs in place will be more capable of adjusting to these changes than those that do not. Consequently, they offer more attractive prospects for future economic development.

- *State Rapid Response Teams*

Twenty-one states have established such teams, funded by federal Job Training Partnership Act funds along with other resources, in order to determine the magnitude and nature of the likely dislocation, develop a strategy for providing coordinated state assistance, inventory existing public and private monies and expertise, design new training, social service and business retention, and evaluate the results.

- *DOL Project Participation*

Six states are also participating in a joint National Governors' Association/U.S.Department of Labor programs to test the application of a Canadian industrial adjustment service for the retraining of dislocated workers.[62]

Findings

While the Policy Index covers an enormous number and variety of state economic development programs, the results -- what the index does and does not indicate -- are startlingly simple.

What the Policy Index shows is where the states stand in the historic and ongoing process of economic restructuring, and how aggressively each state is responding to the challenges that restructuring has created.

What the Policy Index does *not* show -- surprisingly -- is any significant political or ideological pattern to the responses states have made.

It is worth noting, once again, that the pace of state policy innovation is rapid, that state administrations change rather frequently, and that in any given state all of the programs and policies in place today may not be reflected in this index. But, in a sense, perfect accuracy is unnecessary here. What we are trying to gauge is level of effort: Is a state doing most of the things it could do to enhance the vigor -- and by extension the "attractiveness" -- of its economy? Some of the things? Very few of the things?

Analysis of the results of the policy index reveals several interesting stories. While only a decade or so ago industrial recruitment was virtually the only kind of "economic development" conducted by states, today the majority of states are involved in a wide array of often quite imaginative initiatives aimed at strengthening their own "home-grown" businesses. In many cases -- perhaps in all -- it has been a case of necessity mothering invention.

It is no coincidence, for example, that the states with the greatest number of initiatives in the Policy Index -- Massachusetts, Michigan, Minnesota, New York, New Jersey, Ohio and Pennsylvania -- are the states that have been hit hardest by the rapid and disruptive restructuring of America's industrial economy. The pioneer both in terms of disruption and response has been Massachusetts, a state in dire economic straits in the 1970s and the "king of the hill" today.

Following in its footsteps, and the beneficiaries of its successes and failures, are the other industrial giants of the Northeast and the "Rust Belt" -- states both Republican and Democratic, liberal and conservative. With the real prospect that the "Rust Belt" was becoming the "Bust Belt," it was clear to all concerned that something dramatic needed to be done. In the face of extreme economic distress, ideology has played no significant part.

It will take time -- years in the case of improvements in education systems, for example -- for many of the policies and programs listed in this Index to begin to show

results. But to the extent that the programs and policies adopted, or adapted, by these states are aimed at strengthening their own individual competitive advantages, rather than simply cloning some other state's programs, it is reasonable to expect that in a few years the results may be not unlike those of Massachusetts today.

In short, watch out for the "Rust Belt" states: they are moving.

In the second tier, in terms of the number and variety of development programs and policies in place, are two kinds of states: those determined to maintain their already significant competitive position (for example, California, Florida, Maryland and Connecticut) and two still looking for their first big burst of growth (Maine and Vermont) and hoping to build upon and share in the success of their neighbors.

Given the almost universally dismal showing of almost all of the southern states in the three other indexes of this *Report Card*, it might be reasonable to expect them, once again, to be bringing up the rear in the Policy Index. Not so.

The bottom of this index is dominated by the thinly-populated and relatively undeveloped Mountain West and northern Great Plains states -- Wyoming, North and South Dakota and Idaho -- states that have had modest economies that, until the recent collapse of the farm sector, had been bypassed by the wholesale industrial restructuring experienced by more developed states. They haven't needed much in the way of development policy, and they haven't done much.

The southern states, on the other hand, appear to have seen the writing on the wall. Faced with the ever more limited returns from their long-standing industrial recruitment strategies and the bankruptcy of most of the measures of capacity, the South (with the possible exception of Alabama and Tennessee) is rebuilding. With the assistance of the Southern Growth Policies Board and its Commission on the Future of the South, southern states are strengthening their own governmental institutions, investing heavily in education reform, providing new support for indigenous businesses, and stressing the development and application of new technologies in both existing and new businesses.

In the South and in all of the states working to strengthen the competitiveness of their economies and their ability to produce expanding and shared opportunity there is a clear hierarchy of initiatives. Educational reform is preeminent. Small business development and technology development are close behind. Mobilizing needed capital -- particularly if we except conventional tax-exempt bonding -- is unevenly pursued, reflecting in some cases the wealth of the state and in others the willingness of state officials to become active capital market actors. Infrastructure improvements are often called for but action is slow in coming and capital budgeting systems for such investments are still relatively rare. And finally, efforts to bring distressed communities and the people who live in them back into the economic mainstream are very limited indeed.

If the lessons of the past -- illustrated in the first three indexes -- are any guide, however, states which invest in capacity building can expect to see positive long-term results in the vitality of the businesses in their economies and the performance of the economy as a whole -- concrete progress toward expanding shared economic opportunity and creating attractive environments for economic growth.

46. For an excellent overview of this "revolution," see Roger Vaughan, Barbara Dyer, and Robert Pollard, *The Wealth Of States: Policies for a Dynamic Economy* (Washington, D.C.: Council of State Policy and Planning Agencies, 1986); The Corporation for Enterprise Development, *Building The New Economy: States In The Lead*, David R. Jones, Editor, (Washington, D.C.: Corporation for Enterprise Development, 1986); Marianne Clarke, *Revitalizing State Economies: A Review of State Development Policies and Programs* (Washington, D.C.: National Governors' Association, 1986); and Scott Fosler, *Partnership For State Economic Progress* (New York: Committee For Economic Development, April 1986).

47. The National Governors' Association and National Council of State Legislators, among others.

48. A methodological note in the Appendices explores these issues in more detail.

49. This is one of the most difficult areas in which to collect accurate and timely information; ultimately, quality judgments -- which we did not make -- are very important for several of these indicators.

50. Some states do issues scanning on their own, but the power and comprehensiveness of the State Scanning Network simply overshadows isolated efforts.

51. The Massachusetts Commission on Workers' Compensation, which had the involvement and support of labor, industry, and the legal profession, is a good example. The Commission overhauled the state's workers' compensation laws, raising benefits, restructuring the system for awarding benefits, instituting a direct pay system, authorizing group self-insurance and reorganizing the agency responsible for the program. An advisory council was established to monitor implementation and conduct ongoing research.

52. However, such mechanisms often change whenever a new governor is elected, so results may not be entirely accurate. Moreover, this measure says nothing about the extent to which these mechanisms are empowered to achieve the end for which they were created. Performance varies.

53. For more background on business climate and taxes, see Karl Seidman, "The Role of Taxation in State Business Climate," Literature Review, Economic Climate Project, The Corporation for Enterprise Development, January 1987; and The Corporation for Enterprise Development, "Business Climate Tax Index," Economic Climate Project, The Corporation for Enterprise Development, January 1987.

54. Lawrence Litvak and Belden Daniels, *Innovations In Development Finance* (Washington, D.C.: Council of State Planning Agencies, 1979); Lawrence Litvak and Michael Barker, *Pension Funds And Economic Development* (Washington, D.C.: The Gallatin Institute, 1983); Council for Community Development, Inc., *Indiana's Financial Markets And Economic Development: A Fresh Approach* (Cambridge, MA: Council for Community Development, January 1984) and *Maine Small Business Finance* (Cambridge, MA: Council for Community Development, Inc., January 1983); The Corporation for Enterprise Development, *Capital Markets In South Carolina: New Directions for Private and Public Actors* (Washington, D.C.: The Corporation for Enterprise, February 1985); and Peter Kwass and Beth Siegel, *Profile of Michigan's Commercial Banking Industry: Implications for Small Business Capital Availability* (Washington, D.C.: The Corporation for Enterprise Development, January 1986).

55. See James Botkin, Dan Dimancesh, and Ray Stata, *Global Stakes: The Future Of High Technology In America* (Cambridge, MA: Ballinger Publishing Company, 1982); James Hickman and John Strong, "The Evolution of New England Industry," *New England Economic Review*, March/April 1986; U.S. Congress, Joint Economic Committee, "Location Of High Technology Firms and Regional Economic Development," 1 June 1982; and U.S. Congress, Office of Technology Assessment, *Technology, Innovation, and Regional Development* (Washington, D.C.: Government Printing Office, July 1984)

56. Several states currently award competitive grants, in some cases to be matched by funds from industry, universities, non-profit organizations, or the federal government, to sponsor the research of private businesses and corporations which, in part because they are small, could not have conducted such research on their own. Pennsylvania's Ben Franklin Partnership Program targets such grants to speed the development and transfer of research results into new industry. Ohio's Thomas Alva Edison Partnership Program provides "challenge grants" for university research likely to result in new businesses, and recoups its investments, in some cases, from royalties paid on the sale of the products of that research. As with technology centers, these R&D financing programs are designed, in part, to demonstrate the state's commitment to new business development and, as such, are a key indicator of its "attractiveness" to new business.

57. While many studies of infrastructure have been published in the past five years, the most recent, and in many ways most illuminating, is Randall Eberts's "Estimating the Contribution of Urban Infrastructure to Regional Growth," Working paper 8610 for the Federal Reserve Bank of Cleveland, December 1986.

58. The only research done to date on state capital budgeting, conducted by the General Accounting Office and the Office of Management and Budget, uses very liberal definitions of "capital budgeting" but, at least at this time, are the only data currently available.

59. States are also experimenting, however, with uses of unemployment compensation, medicaid and other programs to encourage and support training, self-employment and job-creation.

60. We do not measure "coercive" work programs, in which recipients are required to "work off" their benefits, because most reliable data suggest that voluntary programs are cheaper, more effective, and better address the true barriers to self-sufficiency. See the upcoming Robert E. Friedman, *The Safety Net As Ladder: Transfer Payments and Economic Development* (Washington, D.C.: Council of State Policy and Planning Agencies, projected publication in 1987).

61. Employee ownership is not just an option for avoiding a plant shutdown. Retiring owners with no heir but a viable business and entrepreneurs interested in boosting efficiency and employee involvement are converting their firms as well. In fact there are over 8,000 worker-owned enterprises in the U.S. employing ten million workers; only a fraction have resulted from worker buyouts after or as a response to threatened plant closings.

62. In fact, individuals served by the Industrial Adjustment Service are unemployed one-quarter as long as the non-assisted jobless.

Chapter Six: What It All Means

Understanding the results of the first *Development Report Card* depends upon understanding what it was created for in the first place. This is a tool *for* states and *for* the people and businesses within states. It is designed to help them better understand how their economies are performing and why, and sets benchmarks for measuring progress.

It is premised on the increasing evidence that the enduring sources of wealth come from within an economy -- that the capacity to adapt to and take advantage of change resides in the talents, dispositions and institutions of people within the state. What we seek to measure -- and emphasize -- is the degree to which a state cultivates its own garden and invests in its own people, businesses, and infrastructure. Where traditional business climate definitions emphasize the zero-sum game of interstate bidding wars, the *Development Report Card* emphasizes a positive- sum process in which the development of one state increases the prospects of others by expanding markets, increasing the pool of innovators and inventions, creating new entrepreneurial role models, and establishing new opportunities for in-state investment.

It is our hope that the *Development Report Card* will "concentrate the mind" and focus debate on those dynamics, investments and policies that matter, and end pressures from some to focus on those do not.

Of course any index which compares and ranks states invites invidious comparisons. Were we smarter, we might have been able to construct a set of absolute scales by which states could measure their progress. As it is, we compare relative performance -- we grade on the curve. This gives a somewhat distorted picture of the accomplishments of states which do poorly relative to other states, but which by comparison to the rest of the world or on any absolute scale might do reasonably well. Similarly, the grading probably overly rewards states which rank high, but could still achieve more.

Still, there is method to this madness: by comparing relative state performance, we use an American standard. And the fact that performance among the states varies means that progress is possible and that, at least to some extent, states do indeed have some control over their own destinies.

A Tale of Four States

The nation's fifty states present fifty unique economies, each with its own character and performance, each with its own strengths and weaknesses. In addition, differing political, social, and institutional conditions -- largely unmeasured by the *Development Report Card* -- define the priorities for expanding economic opportunity in each of the states.

Varied as these conditions may be, the *Development Report Card* can be an important tool not simply for measuring current economic conditions, but also -- over time -- for measuring progress toward distinctly different state economic goals. The recent experiences of four quite different states illustrate this capability.

South Carolina

South Carolina -- like so many of its southern neighbors -- is a monument to the crippling long-term economic effects of following the traditional "business climate" prescription for economic health. For 20 years the state operated a concentrated, well-organized, and effective program to lure branch plants of northern and midwestern firms to the state with a low wage. low skill, low cost business climate. Taxes and public investments in education, environmental protection, and infrastructure were kept minimal, and unionization was avoided like the plague. And, to an extent, the program had some short-term success: between 1930 and 1974, per capita income rose from 40 percent of the national average to 80 percent.

But by the early 1970s it became clear that South Carolina was no longer competing with northern states for business -- it was competing with Taiwan and Brazil. And losing. State officials learned that companies footloose enough to move into the state for low wages and other business costs moved out just as quickly when cheaper alternatives developed, or simply went out of business altogether in the face of insuperable international competition. In the first five years of this decade alone, South Carolina lost more than 28,000 manufacturing jobs.

Not surprisingly, South Carolina ranks relatively poorly in the *Development Report Card* economic performance, business vitality, and capacity indexes. Real income levels are low, unemployment and inequality are high. And years of inadequate investment have left a legacy of low education levels, underdeveloped infrastructure, and inadequate financial capital to support new, young, and growing firms. A poor state, it made itself poorer by investing 97 percent of its public pension funds, for example, out-of-state.

But all that is changing, and the evidence that it is changing is the state's rising showing in the Policy Index. In 1985, the state began increasing investments in early childhood education as part of a long-term program to strengthen the "educational and economic preparedness" of its population, even though sales taxes had to be raised to pay for it. The State Development Board, one of the foremost "smokestack chasers" in the nation, added a second track to its development strategy emphasizing the cultivation of small businesses and entrepreneurs already within the state. It has established a network of small business incubators, created seed capital funds, conducted a comprehensive study of the state's capital markets and the extent to which they were meeting the needs of in-state businesses, and reassessed and redirected job training and vocational education programs. Finally, a multi-agency development coordinating council was created to oversee the development and application of new policy and, in the process, strengthen the governance system.

By tracking their progress in the Performance, Vitality, and Capacity Indexes of the *Development Report Card*, South Carolina and many of the other southern states can monitor the impact of the new development policies many of them have begun to establish. They can use the indexes to identify weak points and opportunities and mobilize public and policy support for new initiatives -- both public and private -- to address these challenges. In addition, they can use the indexes to keep track of development initiatives in other states -- in education, capital market expansion, governance structures, and the like.

Michigan

Michigan's report card, like many Great Lakes states,bears the unmistakable imprint of a mature, well-developed industrial economy struggling to meet the challenge of a global restructuring of the industries which form its economic base. On one hand, its respectable Performance Index showing for income, job quality, and quality of life indicates a state that is succeeding in its battle for competitive position. On the other hand, lower scores on some employment and equity measures suggest a state experiencing both the long term effects of wholesale plant closings earlier in this decade and associated job losses for some formerly well-paid workers, and continuing difficulty for those who may always have been on the margins of the economy.

Michigan's economic future will depend, in part, on how well it capitalizes on its not-insignificant competitive advantages (a diversified and well-developed manufacturing economy, and a history of investment in infrastructure and the welfare of its residents) and how effectively it remedies its liabilities (a poor record of in-state investment by financial institutions, for example).

The Policy Index makes it clear that Michigan has taken among the most aggressive steps of any state to set the stage for renewed prosperity: new governance mechanisms to speed the development, adoption, and implementation of a comprehensive economic development strategy; creation of a variety of seed, expansion, and venture capital funds through the Michigan Strategic Fund, new pension fund investment policies, and new partnerships with conventional financial institutions; heavy investments in public education at all levels; creation of new applied technology centers to capitalize on those investments; a restructuring of job training programs; a variety of experiments to provide both workers and communities hard hit by plant closings and those who have never been in the economic mainstream with new employment opportunities; and a tax system capable of supporting these investments.

Having made this extraordinary commitment to economic revitalization, Michigan will want to watch closely its progress in both the Performance and Business Vitality Indexes.

Massachusetts

Massachusetts is the valedictorian, performing consistently at or near the top of every index in the *Development Report Card* (with many of its northeastern neighbors not far behind).

It was not always thus. Only a decade or so ago, all signs indicated a state in serious, long-term economic decline, its industries departing for points south and leaving vacant cities that had been the heart of the American industrial revolution. Unemployment and poverty levels were high and new business startups and self-employment rates low. At the same time, much like Michigan today, Massachusetts had significant investments in place -- an excellent education system, well- developed public infrastructure, and wealthy, if not aggressive, financial institutions -- which, though not widely recognized at the time, offered the state important competitive advantages.

What turned things around for Massachusetts was the simultaneous refocusing of private energies on the development of new products, services, production processes, and markets -- many of them technology-based and drawing on the talents of the products of the states's educational system -- and the establishment of a variety of public policies to support these private initiatives. Between 1975 and 1985, Massachusetts pioneered many of the policies that are now encompassed in our Policy Index -- mobilizing capital through the creation of a number of new financial institutions; targeted investment in declining communities; education and training programs to bring the unemployed or marginally employed into the mainstream workforce; and many others.

But the message of the *Development Report Card* for Massachusetts is not simply that congratulations are in order, though it has clearly done an extraordinary job of creating an environment in which businesses can thrive. The message is *also* that a close look at some of the indicators suggests that more needs to be done to include communities and individuals who are not currently equal beneficiaries of the state's boom. Can women and minority incorporation and self-employment rates and income levels be increased to approach those of white males? What actions can be taken to improve the quality of the jobs being created by the boom? How can economic and social policies be connected to expand the opportunities for all the state's residents to be productive?

The message that Massachusetts represents for other states, and which is inherent in the state's ranks in the Indexes, is that the foundations for economic revitalization are very broad indeed, and include sharp improvements in all four measures: Performance, Vitality, Capacity, and Policies.

Texas

If Massachusetts is the boom state of the 1980s, certainly Texas was the boom state of the 1970s, the pulsing heart of the Sunbelt.

But there are critical differences between the two phenomena, and important lessons to be learned from them.

To many observers, the Texas boom was in large part the result of its "good business climate" -- low taxes, limited government regulation, and right-to-work laws, among others. But the bursting of that bubble in the 1980s made it clear that this view was flawed, both as an explanation of past performance and as a prescription for future prosperity.

It is clear now that what was driving the Texas economy was rapidly rising commodity prices -- particularly energy and agricultural commodities -- interregional migration, and an important entrepreneurial boom in the Dallas-Fort Worth area.

The collapse of the energy industry is not fully represented in the results in this *Report Card*, nor is the depressed agriculture sector. Texas's respectable showing in the Performance Index, therefore, is already somewhat dated. An inadequate tax base and budget deficit trouble do not position the state well to respond to the current challenge. Taking a cue from those that have gone before, aggressive capacity-building is clearly a part of the prescription for the state's future.

Next Year

By next year, the states will have moved along with the economic conditions to which they must respond. And so will this index. We will hope to record their progress, not simply by keeping track but also by improving on many of the measures here and by adding measures that currently are missing.

In short, we hope to provide states, and the people and businesses who live in them, with a clearer picture of how they are doing -- even as we learn from their experiments. In this way, we hope to make progress together.

Appendix A: Data Tables and Sources

Performance Index Data: Tables and Sources

Subindex One: Employment

- *Employment Growth*
  Employment of workers on non-agricultural Payrolls, 1980-1985. Percent Change.
  Source: *Employment and Earnings,* Bureau of Labor Statistics, May 1983 and May 1986.
- *Unemployment Rate*
  Percent Unemployed, 1985.
  Source: Employment and Earnings, Bureau of Labor Statistics, May 1986.
- *Duration of Unemployment*
  Percent of unemployed that are unemployed more than 27 weeks. 1985 Annual Rates.
  Source: U.S. Department of Commerce, Geographic Profile of Employment and Unemployment, Bulletin 2266, September 1986.
- *Status of Displaced Workers*
  Percent of employees displaced in January 1981, re-employed in 1986.
  Source: Bureau of Labor Statistics, Division of Labor Force Statistics, press release October 14, 1986.

Subindex Two: Income

- *Earned Income Per Capita*
  Earned Income Per Capita, 1985, by Place of Residence (in dollars). Earned Income equals earned income corrected for residence plus transfer payments.
  Source: Survey of Current Business, August 1986. Calculations by The Corporation for Enterprise Development.
- *Income Change Per Capita*
  Personal Per Capita Income Change 1980-1985. Corrected for Inflation (using the GNP consumption deflator).
  Source: 1980: *State and Metropolitan Area Data Book*, 1986, Bureau of the Census. For 1985: Bureau of Economic Analysis, U.S. Department of Commerce, News Release, September 9, 1986.
- *Percent Below the Poverty Line*
  Percent of Persons Living in Units with Cash Incomes Below the Poverty Line, by State, 1983.

  Source: *Poverty Rates by State, 1978-1983: Estimates from Annual Current Population Surveys.* Christine Roth, U.S. Congressional Budget Office and Sheldon Danziger, Institute for Research on Poverty, University of Wisconsin, Madison, August 1986.

Subindex Three: Job Quality

- *Number of Working Poor*
  Subpoverty level families as a percent of all households who worked in 1979.
  Source: Computed by the Southern Regional Council from the U.S. Census of Population, 1980. U.S. Summary, Table 245.
- *Hourly Earnings*
  Average Hourly Earnings of Production Workers on Manufacturing Payrolls (in dollars per hour). 1985 Averages.
  Source: *Employment and Earnings*, Bureau of Labor Statistics, May 1986.

- *Job-Related Deaths*
  Mining and Construction Industries. Number of deaths per 1,000 workers, 1945-1983.
  Source: Bureau of Labor Statistics, U.S. Department of Commerce; U.S. Statistical Abstract, 1985. Table 712, p. 425.

- *Health Coverage*
  Percent of Civilian Workforce Covered by Primary Health Plan, by State, 1983.
  Source: Employee Benefit Research Institute. *Employee Benefit Notes*, September/October, 1984.

Subindex Four: Equity

- *Distribution of Income*
  Income Distribution: Gini Coefficients for the States, 1983.
  Source: Social Welfare Research Institute, Boston College, "The Micro Economic Impacts of Macro Economic Fiscal Policy, 1981-1985," November 11, 1985.

- *Black Income as a Percentage of White Income*
  Median income (current dollars) of unrelated individuals 15 years and over.
  Source: 1980 Census, Table 61: Selected Social and Economic Characteristics by Race, from individual state volumes: General Social and Economic Characteristics. Calculations by The Corporation for Enterprise Development.

- *AFDC Benefits as a Percentage of Per Capita Income*
  Maximum AFDC Benefits as a Percent of Per Capita Personal Income, Family of Four, January 1986 (Percent).
  Source: Congressional Research Service of the Library of Congress, from survey records of the U.S.Department of Health and Human Services; Per Capita Income, 1984, comes from the Bureau of Economic Analysis of the U.S. Department of Commerce. From *State Policy Data Book*, State Policy Research, Inc., Table G-5, 1986.

- *Life Expectancy*
  Average Life Expectancy In Years for Births in 1979-1981.
  Source: National Center for Health Statistics, *U.S. Decennial Tables for 1979-1981.*

- *Infant Mortality*
  Infant Mortality Rates, 1984. Deaths per 1000 live births.
  Source: Dana Hughes, et al., *The Health of America's Children: Maternal and Child Health Data Book* (Washington, DC: Children's Defense Fund, 1987). Table 3.9, page 201.

- *Crime Index*
  The Crime Rate per 100,000 Residents. Total offenses per 100,000 population, 1985.
  Source: *Annual Crime Report*, Federal Bureau of Investigation, 1986.

All per capita population calculations were made by The Corporation for Enterprise Development. Source: 1985 population, Bureau of the Census, Press Release 12/27/85.

Performance Data

	Employment								Income					
	Employment Growth		Rate of Unemployment		Duration of Unemployment		Displaced Worker Status		Earned Income per Capita		Income Change per Capita		Percent Below Poverty Level	
	%	Rank	%	Rank	%	Rank	%	Rank	$/Ann	Rank	%	Rank	%	Rank
Alabama	4.7	29	8.9	42	14.9	32	67	26	9,311	40	11.7	25	22.9	48
Alaska	36.7	1	9.7	46	7.1	2	57	44	16,520	1	8.3	33	12.5	13
Arizona	27.3	2	6.5	22	7.4	4	74	13	10,508	28	13.0	21	16.6	33
Arkansas	7.4	23	8.7	39	11.1	18	65	34	8,869	47	16.1	16	21.6	45
California	11.5	13	7.2	29	11.6	19	71	20	13,331	6	14.3	19	14.9	22
Colorado	13.7	8	5.9	16	8.2	6	66	30	12,404	9	14.5	18	12.6	14
Connecticut	10.1	19	4.9	5	9.6	13	66	30	14,716	2	25.0	5	9	5
Delaware	13.6	9	5.3	9	9.6	13	75	12	11,979	13	11.9	23	8.5	3
Florida	23.8	3	6.0	19	8.3	7	71	20	10,441	29	17.1	15	14.9	22
Georgia	19.5	5	6.5	22	7.9	5	74	13	10,827	25	24.5	6	18.8	42
Hawaii	4.7	29	5.6	13	11.7	20	50	50	11,762	14	4.9	42	13.4	16
Idaho	1.8	37	7.9	32	9.4	12	56	46	9,226	43	5.8	38	17.3	39
Illinois	-2.6	49	9.0	44	20.8	45	64	36	12,091	12	9.6	29	14.3	20
Indiana	1.8	37	7.9	32	17.3	40	76	11	10,424	30	7.2	37	16.1	32
Iowa	-2.5	48	8.0	34	24.3	49	64	36	9,974	34	5.2	40	16.6	33
Kansas	2.7	35	5.0	7	12.0	21	72	18	11,261	20	9.1	31	13.5	17
Kentucky	3.1	33	9.5	45	20.3	44	64	36	9,188	44	10.1	28	18.0	40
Louisiana	1.7	39	11.5	49	18.5	41	57	44	9,617	38	2.6	46	21.7	46
Maine	9.5	20	5.4	10	13.0	26	72	18	9,946	35	21.8	8	12.4	12
Maryland	11.2	16	4.6	3	14.6	31	79	8	13,406	5	21.5	9	8.6	4
Massachusetts	10.5	18	3.9	1	12.5	24	77	9	13,578	4	30.7	2	7.7	1
Michigan	1.5	41	9.9	47	22.3	47	67	26	11,480	18	7.4	35	16.8	36
Minnesota	5.4	28	6.0	19	16.3	34	74	13	11,682	15	14.3	19	12.2	11
Mississippi	-0.1	42	10.3	48	16.8	36	69	22	8,045	50	7.4	35	27.0	50
Missouri	6.4	26	6.4	21	14.0	29	67	26	10,735	26	18.0	12	16.8	36
Montana	-0.9	45	7.7	31	16.4	35	69	22	8,682	49	0.2	48	15.1	25
Nebraska	3.0	34	5.5	12	14.1	30	64	36	10,707	27	17.8	14	15.3	26
Nevada	11.5	13	8.0	34	13.0	26	81	4	12,144	11	2.1	47	9.8	6
New Hampshire	21.0	4	3.9	1	6.2	1	95	1	12,485	8	30.8	1	8.1	2
New Jersey	12.0	12	5.7	15	13.3	28	65	34	14,053	3	27.7	3	11.0	9
New Mexico	12.1	11	8.8	40	17.1	38	74	13	9,308	41	5.8	38	24.2	49
New York	7.6	22	6.5	22	17.1	38	55	47	13,122	7	25.2	4	15.9	30
North Carolina	10.9	17	5.4	10	12.4	22	69	22	10,053	33	17.9	13	15.9	30
North Dakota	2.0	36	5.9	16	9.0	9	64	36	9,524	39	7.8	34	15.0	24
Ohio	-0.5	44	8.9	42	23.8	48	63	41	11,082	22	9.2	30	13.6	18
Oklahoma	3.9	3	7.1	27	12.4	22	81	4	10,221	32	4.0	43	16.9	38
Oregon	-1.2	47	8.8	40	19.2	43	66	30	10,276	31	3.9	44	16.6	33
Pennsylvania	-0.4	43	8.0	34	19.0	42	62	42	11,187	21	12.2	22	15.5	27
Rhode Island	6.5	25	4.9	5	7.3	3	73	17	11,494	17	19.6	11	14.8	21
South Carolina	9.4	21	6.8	25	14.9	32	77	9	9,230	42	11.8	24	21.0	44
South Dakota	4.2	31	5.1	8	10.6	17	67	26	8,949	46	11.3	26	18.1	41
Tennessee	7.2	24	8.0	34	17.0	37	54	48	9,692	37	14.7	17	20.1	43
Texas	14.0	7	7.0	26	9.2	10	66	30	11,446	19	11.3	26	15.7	29
Utah	12.6	10	5.9	16	9.8	15	82	3	9,127	45	5.1	41	13.9	19
Vermont	11.5	13	4.8	4	9.9	16	83	2	9,929	36	20.5	10	15.6	28
Virginia	15.4	6	5.6	13	8.8	8	80	7	12,276	10	22.4	7	11.4	10
Washington	6.2	27	8.1	38	12.5	24	69	22	11,513	16	3.9	44	10.9	8
West Virginia	-7.7	50	13.0	50	31.1	50	53	49	8,754	48	0.1	49	22.3	47
Wisconsin	1.6	40	7.2	29	21.5	46	59	43	10,868	24	9.0	32	10.6	7
Wyoming	-1.0	4	7.1	27	9.3	11	81	4	11,059	23	-11.4	50	12.7	15

Please refer to *Performance Data:* Tables and Sources and the Performance Index for further detail on individual variable measures.

Job Quality								Equity						Quality of Life			
Working Poor %	Rank	Hourly Earnings $/Hr	Rank	Job Related Death ~~Rates~~ #	Rank	Health Plan Coverage %	Rank	Distribution of Income Gini	Rank	Black Income as % of White %	Rank	AFDC as % of PC Income %	Rank	Average Life Expectancy Age	Rank	Infant Mortality per 1,000 Deaths	Rank	Crime Rate per 100,000 Rate	Rank
9.4	45	8.50	34	5.6	29	54.82	36	0.389	35	56.6	43	18.0	27	72.5	45	12.9	47	3942.1	15
6.0	25	12.20	2	12.1	45	55.01	34	0.355	12	63.8	37	56.0	5	72.2	46	11.2	38	5877.0	40
6.9	31	9.50	23	8.0	39	56.12	32	0.404	42	69.9	30	36.0	16	74.3	21	9.5	10	7116.2	49
10.0	48	7.60	44	5.0	23	48.33	46	0.424	50	58.7	42	27.0	23	73.7	29	10.9	31	3585.0	8
5.7	21	10.10	12	4.2	15	60.65	19	0.386	33	72.4	28	58.0	4	74.6	19	9.4	9	6518.0	43
5.4	19	9.50	23	9.4	43	52.44	39	0.390	38	80.5	12	36.0	16	75.3	8	10.2	20	6919.1	48
3.2	1	9.60	20	3.5	7	63.11	8	0.350	7	79.5	13	48.0	9	75.1	11	10.4	23	4704.8	26
6.1	26	9.80	17	5.9	33	66.02	2	0.376	26	72.5	27	31.0	19	73.2	40	10.8	29	4961.3	30
7.1	33	7.90	43	7.0	38	51.84	40	0.403	41	55.7	45	28.0	22	74.0	22	10.8	29	7574.2	50
8.6	43	8.00	42	5.0	23	59.64	23	0.421	48	56.4	44	27.0	23	72.2	46	12.9	47	5110.1	32
4.7	13	8.60	33	4.5	18	62.43	12	0.350	7	81.9	11	50.0	8	77.0	1	9.9	14	5200.6	33
7.9	38	9.40	27	5.5	28	58.93	26	0.379	31	82.8	8	41.0	12	75.2	10	9.8	13	3908.1	13
4.5	10	10.40	7	4.0	11	65.77	3	0.354	9	65.3	34	33.0	17	73.4	36	12.1	43	5299.7	34
5.2	18	10.70	5	4.2	15	61.39	14	0.344	3	82.7	9	32.0	18	73.8	26	11.1	36	3914.1	14
5.8	23	10.30	9	3.6	8	49.67	43	0.377	28	72.1	29	44.0	11	75.8	3	8.8	4	3942.9	16
5.4	19	9.50	23	6.1	34	54.98	35	0.363	18	76.3	20	41.0	12	75.3	8	10.1	19	4375.1	24
9.4	45	9.50	23	8.9	42	59.96	22	0.367	20	66.7	32	29.0	21	73.1	41	11.5	39	2947.2	4
9.0	44	10.40	7	13.8	48	56.71	31	0.422	49	47.7	49	26.0	24	71.7	50	12.1	43	5563.6	38
7.1	33	8.40	36	4.0	11	56.85	30	0.362	17	96.0	1	54.0	7	74.6	19	8.4	2	3671.7	9
4.3	5	9.70	18	5.2	26	62.09	13	0.378	30	76.8	17	33.0	17	73.3	38	11.8	41	5372.8	36
3.3	2	9.00	31	3.0	3	62.95	10	0.369	22	86.1	5	41.0	12	75.0	13	9.0	7	4754.8	28
4.4	7	12.60	1	3.2	5	60.99	16	0.359	15	78.2	14	55.0	6	73.7	29	11.7	40	6366.3	41
5.1	16	10.00	13	4.1	14	51.17	41	0.354	9	85.3	6	56.0	5	76.2	2	8.9	6	4134.2	20
12.7	50	7.20	49	6.7	36	57.10	29	0.408	43	55.5	46	20.0	26	72.0	48	14.4	49	3265.7	7
6.3	28	9.60	20	4.3	17	56.12	32	0.389	35	77.9	16	32.0	18	73.8	26	10.4	23	4366.0	23
7.4	36	11.00	4	8.1	40	37.63	50	0.389	35	93.0	4	48.0	9	73.9	25	8.8	4	4549.3	25
6.3	28	9.00	31	3.8	10	49.19	44	0.356	13	76.4	19	41.0	12	75.5	6	9.6	11	3694.6	10
4.7	13	9.10	30	6.8	37	66.35	1	0.369	22	84.5	7	31.0	19	72.6	44	10.5	27	6574.6	46
4.4	7	8.40	36	5.8	31	59.11	25	0.342	2	64.1	36	40.0	13	75.0	13	10.2	20	3251.9	6
3.8	4	9.90	14	3.6	8	64.34	6	0.357	14	75.6	22	36.0	16	74.0	22	10.9	31	5094.4	31
9.4	45	8.40	36	12.4	46	51.14	42	0.414	45	76.8	17	37.0	15	74.0	22	9.6	11	6486.2	42
3.5	3	9.70	18	3.0	3	65.55	4	0.376	26	76.2	21	59.0	3	73.7	29	11.0	33	5588.5	39
7.7	37	7.30	48	4.7	20	63.04	9	0.409	44	63.7	38	30.0	20	73.0	42	12.4	46	4121.4	19
8.1	40	8.10	41	6.3	35	41.16	49	0.393	39	94.3	3	44.0	11	75.7	5	8.1	1	2679.4	3
4.8	15	11.40	3	4.0	11	64.11	7	0.367	20	69.4	31	36.0	16	73.5	35	10.4	23	4187.3	22
7.0	32	9.90	14	13.4	47	48.10	47	0.401	40	65.5	33	40.0	13	73.7	29	11.0	33	5425.0	37
5.7	21	10.50	6	3.3	6	59.26	24	0.377	28	74.4	25	50.0	8	75.0	13	9.9	14	6729.8	47
4.3	5	9.60	20	4.7	20	64.53	5	0.354	9	73.7	26	45.0	10	73.6	33	10.4	23	3037.4	5
4.6	11	7.60	44	2.9	1	59.99	21	0.382	32	74.7	23	54.0	7	74.8	17	9.9	14	4723.5	27
8.4	42	7.60	44	5.7	30	58.73	27	0.359	15	54.5	48	28.0	22	71.8	49	14.7	50	4840.5	29
10.8	49	7.40	47	4.5	18	45.94	48	0.365	19	82.5	10	40.0	13	75.0	13	10.0	18	2640.8	2
8.2	41	8.30	40	4.8	22	62.67	11	0.416	46	63.2	39	21.0	25	73.3	38	11.8	41	4166.7	21
7.9	38	9.40	27	11.7	44	57.51	28	0.416	46	62.3	41	21.0	25	73.6	33	10.5	27	6568.7	45
6.1	26	9.40	27	8.1	40	53.64	37	0.349	6	41.0	50	54.0	7	75.8	3	9.1	8	5317.3	35
6.8	30	8.40	36	5.2	26	56.85	30	0.348	4	55.1	47	72.0	1	74.8	17	8.7	3	3888.0	12
5.8	23	8.50	34	5.8	31	61.25	15	0.386	33	62.6	40	37.0	15	73.4	36	12.1	43	3779.1	11
5.1	16	NA	3	5.0	23	52.84	38	0.348	4	78.0	15	54.0	7	75.1	11	10.2	20	6528.8	44
7.2	35	10.20	11	14.6	49	60.93	17	0.370	24	74.7	23	38.0	14	72.8	43	11.0	33	2252.8	1
4.4	7	10.30	9	2.9	1	60.76	18	0.340	1	95.5	2	62.0	2	75.4	7	9.9	14	4016.7	18
4.6	11	9.90	14	25.6	50	48.69	45	0.373	25	65.0	35	38.0	14	73.8	26	11.1	36	4015.1	17

Business Vitality Index Data: Tables and Sources

Subindex One: Competitiveness of Existing Businesses

- *International Exports*
  Export Related Manufactures as a Percent of State Manufacturing Production, 1983.
  Source: International Trade Administration, "Business America," April 28, 1986.
- *Manufacturing Investment Per Production Worker*
  New Capital Expenditure per Production Worker, 1984 (in Thousands of Dollars).
  Source: Census Bureau, *Annual Survey of Manufacturers*, 1984. Table 1: Historical Statistics for the United States and States: 1984 and Earlier Years.
- *Percent of High Growth Companies*
  Percent of businesses in state which have a growth index of 20 or over between beginning of 1982 and beginning of 1986. Index number derived by multiplying percent of job growth by absolute job growth.
  Source: *Inc.*, October 1986. Developed by Cognetics, Cambridge, Massachusetts.
- *Presence of Fortune 1000 Corporation Headquarters*
  Presence of Fortune 1000 Firms, by State, 1985. Fortune 1000 headquarters per million residents.
  Source: *Fortune*, April 28, 1986 and June 9, 1986. Calculations by The Corporation for Enterprise Development.

Subindex Two: Entrepreneurial Energy

- *Business Formation Rates*
  Percent of all business establishments in state founded after 1981 with 10 or more employees by January 1986.
  Source: *Inc.*, October 1986. Developed by Cognetics, Cambridge, Massachusetts.
- *Self-Employment Rates*
  Non-Agriculturally Self-Employed Persons as a Percent of the Labor Force, 1980.
  Source: 1980 Census. Table 240, General Social and Economic Characteristics, U.S. Summary, Bureau of the Census. Calculations by The Corporation for Enterprise Development.
- **Minority And Women Business Ownership**
- *Women's Business Ownership*
  Percent of the Female Labor Force Owning Businesses, 1982.
  Source: 1982 Economic Census, Women Owned Businesses, U.S. Department of Commerce, Bureau of the Census. *State and Metropolitan Area Data Book*, 1986. Calculations by The Corporation for Enterprise Development.
- *Minority Business Ownership*
  Percent of the Minority Labor Force Owning Businesses, 1982.
  Source: *1982 Survey of Minority Owned Business Enterprises*. Volumes entitled: *Hispanic*; *Black*; and *Asian American, American Indians, and Other Minorities*. State and Metropolitan Area Data Book 1986. Calculations by The Corporation for Enterprise Development.

All per capita population calculations were made by The Corporation for Enterprise Development. Source: 1985 population, Bureau of the Census, Press Release 12/27/85.

Business Vitality Data

	Competitiveness of Existing Business							
	Int'l Exports		Mfg Investment		Growth Companies		Corp Headquarters	
	percent	rank	$ in 000s	rank	percent	rank	hdqtrs/million	rank
Alabama	11.00	19	4.9	37	1.83	36	0.99	39
Alaska	25.40	1	12.9	3	3.23	5	1.92	34
Arizona	14.50	6	9.0	5	3.29	3	2.82	25
Arkansas	11.60	17	3.9	48	1.60	41	2.97	22
California	11.90	11	7.1	12	2.83	9	4.02	13
Colorado	10.90	22	8.0	9	2.51	15	2.48	29
Connecticut	15.00	4	5.1	33	2.69	12	16.70	1
Delaware	11.70	14	8.6	7	3.35	2	12.86	2
Florida	11.70	14	6.0	23	2.43	19	2.02	33
Georgia	8.30	43	5.3	30	2.77	10	3.35	19
Hawaii	7.70	45	4.4	43	1.88	34	3.80	16
Idaho	10.40	28	7.0	13	1.40	46	2.99	21
Illinois	10.10	31	5.0	35	2.12	28	7.80	4
Indiana	11.80	12	6.1	20	2.15	27	2.91	24
Iowa	9.00	42	4.8	38	1.30	48	2.08	31
Kansas	7.40	46	7.7	10	1.99	30	1.63	36
Kentucky	9.60	35	6.4	18	1.63	40	1.61	37
Louisiana	11.30	18	14.9	1	2.11	29	0.89	41
Maine	9.30	37	6.1	20	2.27	24	0.86	42
Maryland	9.30	37	7.0	13	3.11	6	2.73	26
Massachusetts	13.30	7	5.4	28	3.41	1	5.15	10
Michigan	13.30	7	6.6	17	2.19	25	3.85	15
Minnesota	10.30	30	7.2	11	1.99	30	7.39	5
Mississippi	9.40	36	3.9	48	1.48	43	0.00	49
Missouri	10.10	31	5.6	24	1.83	36	5.37	8
Montana	6.80	48	4.6	40	1.18	49	0.00	44
Nebraska	8.20	44	4.1	47	1.49	42	3.74	17
Nevada	9.90	33	4.2	46	1.97	32	0.00	45
New Hampshire	10.60	25	4.4	43	3.29	3	3.01	20
New Jersey	9.30	37	5.3	30	2.48	17	5.55	7
New Mexico	6.40	49	13.8	2	2.51	15	0.00	47
New York	10.40	28	5.5	25	2.44	18	8.77	3
North Carolina	10.60	25	5.0	35	2.36	21	2.08	32
North Dakota	9.10	41	6.4	18	1.16	50	0.00	48
Ohio	12.10	10	5.4	28	2.17	26	5.58	6
Oklahoma	10.80	23	5.2	32	1.82	38	2.12	30
Oregon	12.20	9	4.5	42	1.69	39	2.61	27
Pennsylvania	10.50	27	4.7	39	2.28	23	4.47	11
Rhode Island	10.70	24	2.8	50	2.85	8	5.17	9
South Carolina	11.70	14	6.1	20	2.33	22	0.90	40
South Dakota	7.10	47	4.4	43	1.32	47	0.00	46
Tennessee	11.00	19	4.6	40	2.40	20	2.52	28
Texas	11.80	12	9.1	4	3.07	7	3.91	14
Utah	9.70	34	6.7	16	2.75	11	1.22	38
Vermont	14.80	5	8.7	6	2.66	13	1.87	35
Virginia	11.00	19	5.1	33	2.60	14	4.38	12
Washington	24.10	2	8.4	8	1.86	35	2.95	23
West Virginia	16.10	3	6.8	15	1.45	44	0.52	43
Wisconsin	9.30	37	5.5	25	1.93	33	3.56	18
Wyoming	5.20	50	5.5	25	1.41	45	0.00	50

Please refer to *Business Vitality:* Tables and Sources and the Business Vitality Index for further detail on individual variable measures

Entrepreneurial Energy

Business Formation		Self Employed		Women's Busines		Minority Business	
percent	rank	percent	rank	percent	rank	percent	rank
2.19	18	7.17	35	5.5	47	2.5	50
2.92	6	9.04	10	14.1	1	15.5	8
4.07	1	8.00	22	8.8	22	18.9	4
1.74	40	9.25	8	7.4	27	3.4	44
2.70	8	8.98	11	9.6	17	13.6	10
3.05	3	9.25	8	13.1	2	17.9	5
1.90	31	7.30	31	7.4	27	4.9	30
2.11	21	5.96	48	6.2	43	3.4	44
3.04	4	9.58	5	8.0	24	7.8	16
2.94	5	7.16	36	5.8	44	3.2	46
1.93	28	7.50	30	9.8	15	10.5	12
1.77	38	10.12	4	10.9	8	25.0	2
1.76	39	6.51	42	6.6	39	4.4	32
2.08	22	6.63	41	7.9	25	4.2	35
1.19	50	8.18	21	9.4	19	7.8	16
1.98	26	8.57	15	10.9	8	8.7	13
2.05	25	7.67	27	7.2	30	4.2	35
2.41	14	7.64	28	7.0	36	3.9	41
1.41	47	9.34	7	9.5	18	7.3	18
2.69	9	6.28	45	7.2	30	5.4	26
2.07	23	6.74	39	7.2	30	5.9	22
1.93	28	6.28	45	7.1	34	4.0	39
1.83	35	7.70	26	9.4	19	6.3	19
1.87	33	7.88	23	5.5	47	2.8	47
1.86	34	7.71	25	7.6	26	4.2	35
1.46	46	10.56	1	12.6	3	4.3	34
1.51	44	8.35	18	10.3	14	41.3	1
2.73	7	7.26	33	7.4	27	5.9	22
2.18	19	8.39	17	8.1	23	8.1	15
2.15	20	7.28	32	5.6	46	5.1	29
2.29	16	8.74	13	9.7	16	20.9	3
1.97	27	7.62	29	7.1	34	5.3	27
2.33	15	1.74	50	5.8	44	3.5	43
1.38	48	7.77	24	11.0	7	5.3	27
1.89	32	6.10	47	6.9	37	4.0	39
2.24	17	9.51	6	10.9	8	5.9	22
1.80	36	10.36	3	11.1	6	6.3	19
1.71	41	6.67	40	6.5	41	3.9	41
1.56	43	6.96	37	5.3	49	5.8	25
2.56	11	2.09	49	5.1	50	2.7	48
1.23	49	8.90	12	10.7	11	4.2	35
2.44	13	7.18	34	6.4	42	2.7	48
3.88	2	8.19	20	8.9	21	14.0	9
2.50	12	8.24	19	12.0	4	15.7	7
1.50	45	10.41	2	10.7	11	10.6	11
2.67	10	6.34	44	6.6	39	4.4	32
2.06	24	8.73	14	10.4	13	8.7	13
1.93	28	6.42	43	7.2	30	6.3	19
1.68	42	6.95	38	6.7	38	4.7	31
1.80	36	8.57	15	12.0	4	17.1	6

Capacity Index Data: Tables and Sources

Subindex One: Human Resource Capacity

- **Labor Force Skills and Educational Quality**
- *College Education Attainment*
  Percent of Population over 25 with at least 4 years of College. 1980.
  Source: National Center for Education Statistics, "Digest of Education Statistics. 1986-1986."

- *High School Graduation Rate*
  Percent of High School Entrants Graduating. Adjusted for migration and unclassified students. 1985.
  Source: U.S. Department of Education, Office of Planning, Budget and Evaluation, "Wall Chart," February 1987.

- *Public Expenditures Per Pupil*
  Expenditures per Pupil, 1984-1985 (in dollars).
  Source: American Federation of Teachers, Department of Research, April 1986.

- *Pupil/Teacher Ratios in Primary and Secondary Schools*
  Pupils per Teacher, 1984-1985.
  Source: American Federation of Teachers, Department of Research, April 1986.

- *Net Migration of College Students*
  Net Migration of College Students, Fall 1981 (in thousands).
  Source: National Center for Education Statistics, U.S. Department of Education. "Digest of Education Statistics. 1986-1986."

- **Technological Innovation and the Pool of Innovators**
- *Scientists and Engineers as a Percent of the Workforce*
  Scientists and Engineers per 100,000 Population, 1982.
  Source: "Scientists and Engineering Doctorates," Division of Science Resource Studies, National Science Foundation, 1985.

- *Number of Doctoral Degrees in Physical Sciences and Engineering*
  New Science and Engineering Doctorates by State, 1985 (number per 100,000 population).
  Source: "Characteristics of Doctorates in Science and Engineering in the United States" Division of Science Resource Studies, National Science Foundation.

- *Patents Issued Per 1,000 Residents*
  Patents Issued Per 1,000 Residents.
  Source: "Technology Assessment and Forecast Report: Patent Counts by Country/State and Year, 1/1963 - 12/1985," report prepared by the Office of Documentation, U.S. Patent and Trademark Office, March 1986; United States Bureau of the Census, *Current Population Reports*, Series P25, January 1986.

- *University Research and Development Spending*
  Research and Development Expenditures at Doctorate Granting Institutions by State, Per Capita, 1985 (in dollars).
  Source: "Characteristics of Doctorates in Science and Engineering in the United States" Division of Science Resource Studies, National Science Foundation, 1986.

- *Federal Research and Development Spending*
  Federal Obligations for Research and Development, Per Capita, 1985 (in dollars).
  Source: National Science Foundation, 1986, cited in *Wall Street Journal*, November 11, 1986. "Federal Funds for Research and Development," Division of Science Resource Studies, National Science Foundation.

- **Entrepreneurial Culture**
- *Entrepreneurial Awareness*

  Index of Media Mentions of Entrepreneurship by State. Articles mentioning entrepreneurship and state as a percentage of all articles on state and all articles on entrepreneurship added.

  Source: TRAC, Inc., Alexandria, Virginia. Computer search of the following databases in the DIALOG Information System. File 15; ABI Inform, File 16; PTS Prompt, File 75; Management Contents, File 148; Trade and Industry, and File 260; UPI wire.

Subindex Two: Financial Resource Capacity

- **Capital Resources**
- *Commercial Bank Deposits Per Capita*

  Deposits Per Capita, Commercial Banks, Domestic Actitivities. June 1986 (in dollars).

  Source: Division of Research, Federal Deposit Insurance Corporation, unreleased data, 1987. Calculations by The Corporation for Enterprise Development.

- *Dividends, Interest and Rent Income Per Capita*

  Dividends, Rents and Interest Per Capita, 1985 (in dollars).

  Source: *Survey of Current Business*, August 1986. Calculations by The Corporation for Enterprise Development.

- *Venture Capital Headquartered in the State*

  Venture Capital Funds Headquartered in the State, Per Capita, 1985 (in dollars).

  Source: AmeriTrust Corporation and SRI International, "Indicators of Economic Capacity." December 1986.

- **Capital Utilization**
- *Loans to Equity*

  Total Loans and Leases as a Percent of Total Equity, Commercial Banks, Domestic Actitivities. Ratio. June 1986.

  Source: Division of Research, Federal Deposit Insurance Corporation, unreleased data, 1987. Calculations by The Corporation for Enterprise Development.

- *Commercial and Industrial Loans Per Non-agricultural Employee*

  Commercial and Industrial Loans Per Production Worker on Non-agricultural Payrolls, 1985 (in dollars). Commercial Banks, Domestic Activities. June 1986.

  Source: Division of Research, Federal Deposit Insurance Corporation, unreleased data, 1987. Employment and Earnings, May 1986. Calculations by The Corporation for Enterprise Development.

Subindex Three: Physical Infrastructure Capacity

- *Transportation System Capacity*

  Percent of Rural Non-Interstate Principal Arterials with Pavement Serviceability Ratings Below 2.0. December 1984.

  Source: Federal Highway Administration. *Status of the Nation's Highways; Report to the Congress*, Federal Highway Administration, June 1985.

- *Sewage Treatment Plant Capacity*

  Estimated Backlog of Sewage Treatment Plant Unmet Needs, Per Capita, January 1984 (in dollars).

  Source: U.S. Department of Commerce, Bureau of the Census, and Environmental Protection Agency. Calculations performed by *State Policy Reports*.

- *Airport Capacity*

  Airport Takeoffs and Landings, Per Capita, November 1983.

  Source: State and Metropolitan Area Data Book, 1986. Calculations by The Corporation for Enterprise Development.

Subindex Four: Amenities

- *Doctors Per Capita*
  Physicians, Active, Non Federal, Number Per 100,000 Population, 1982.
  Source: *State and Metropolitan Area Data Book*, Bureau of the Census.

- *State Arts Agency Appropriations*
  State Art Agencies Legislative Appropriations, Fiscal Year 1986, Per Capita (in dollars).
  Source: National Assembly of State Arts Agencies. As published in "Estimates of Philanthropic Giving in 1985 and the Trends They Show," *Giving USA*, 31st Annual Issue, New York: Algonquin Press, 1986. Page 89.

- *Distribution of Foundation Grant Funds*
  State Distribution of Grants Received, Per Capita, 1985 (in dollars).
  Source: *The Foundation Grants Index, 14th Edition.*

All per capita population calculations were made by The Corporation for Enterprise Development. Source: 1985 population, Bureau of the Census, Press Release 12/27/85.

Capacity Data

Human Resource Capacity

	Labor Force Skills and Educational Quality										Technological Innovation and			
	College Graduation		High School Graduation		Expenditures per Pupil		Pupil/Teacher Ratio		College Student Migration		Scientists per 100,000		Doctoral Degrees per 100,000	
	%	Rank	%	Rank	$	Rank		Rank	1,000's	Rank	#	Rank	#	Rank
Alabama	12.6	45	63.0	42	$2241	49	20.2	29	4.6	12	1.04	45	28	44
Alaska	22.4	2	67.1	37	6867	1	16.4	14	-2.0	[illegible]	2.02	15	15	50
Arizona	16.8	19	64.5	36	4074	7	18.3	21	17.0	2	1.45	30	77	21
Arkansas	9.7	50	75.7	20	2344	46	17.9	20	-0.4	36	0.67	50	25	46
California	19.8	6	65.8	38	3291	24	23.3	32	37.0	1	2.10	14	93	13
Colorado	23.0	1	72.2	29	3398	22	19.2	25	3.9	16	2.67	6	103	9
Connecticut	21.2	3	80.4	10	4477	5	13.6	2	-10.0	47	2.36	8	88	14
Delaware	16.3	21	69.[illegible]	34	3814	12	16.4	14	0.3	33	6.73	1	109	5
Florida	14.7	34	61.2	47	3409	21	16.6	15	5.6	9	0.85	49	37	40
Georgia	15.3	27	62.6	44	2692	37	19.3	26	3.6	17	1.08	43	55	31
Hawaii	20.3	4	73.8	25	3596	15	19.9	28	-1.1	40	2.13	12	101	10
Idaho	16.1	22	76.7	15	2290	48	20.5	30	1.7	23	1.72	19	35	41
Illinois	14.5	35	74.0	24	3517	16	18.3	21	-15.9	49	1.56	24	95	12
Indiana	12.4	46	76.4	16	2638	40	19.3	26	6.9	8	1.38	35	99	11
Iowa	14.1	38	86.5	3	3096	29	16.2	12	4.0	15	1.38	35	111	4
Kansas	15.7	25	81.4	9	3668	14	15.4	6	3.2	19	1.35	38	107	8
Kentucky	11.0	48	68.2	35	2792	35	19.9	28	1.4	25	0.96	48	32	42
Louisiana	13.4	42	54.7	48	2650	38	19.0	24	4.3	14	1.18	41	28	45
Maine	14.0	39	78.6	11	3038	31	16.6	15	-1.1	40	1.51	27	15	49
Maryland	19.8	6	77.7	12	4101	6	17.7	19	-8.5	46	3.51	3	87	15
Massachusetts	20.0	5	76.3	17	3889	10	15.7	8	14.8	4	3.21	4	183	1
Michigan	15.2	29	71.9	30	3434	20	22.7	31	-3.5	45	1.39	33	79	17
Minnesota	16.7	20	90.6	1	3100	28	17.3	18	-2.3	44	1.63	21	79	17
Mississippi	13.0	44	61.8	46	2300	47	18.6	23	1.1	28	1.07	44	38	39
Missouri	14.0	39	76.1	18	2993	32	16.8	16	7.2	7	1.41	32	60	28
Montana	17.3	15	82.9	8	3968	9	14.6	4	-0.6	38	1.60	23	42	37
Nebraska	16.1	22	86.9	2	3128	27	15.2	5	0.9	29	1.47	29	64	26
Nevada	15.1	31	63.9	40	2590	41	20.2	29	-1.3	42	0.98	47	18	48
New Hampshire	18.4	13	75.2	21	2541	42	15.7	8	1.2	26	1.26	40	47	36
New Jersey	18.6	12	77.3	13	5219	2	15.5	7	-37.7	50	2.37	7	52	34
New Mexico	17.3	15	71.9	30	2467	44	18.4	22	-0.6	38	3.64	2	78	20
New York	18.7	11	62.7	43	4632	4	15.4	6	-11.2	48	2.21	11	108	6
North Carolina	13.4	42	70.3	33	2483	43	19.2	25	9.3	5	1.52	26	73	24
North Dakota	15.2	29	86.1	4	2813	34	16.1	11	0.7	30	1.62	22	53	33
Ohio	14.8	33	76.1	18	3315	23	18.4	22	2.9	20	1.49	28	65	25
Oklahoma	15.7	25	71.1	32	3270	25	16.9	17	2.6	22	1.36	37	55	32
Oregon	17.2	17	72.7	28	3470	18	18.3	21	1.2	26	1.73	18	84	16
Pennsylvania	13.8	41	77.2	14	4002	8	16.8	16	2.7	21	1.71	20	77	22
Rhode Island	15.3	27	71.3	31	3494	17	15.9	9	4.9	10	2.25	10	163	2
South Carolina	14.2	36	62.4	45	2650	39	17.9	20	0.7	30	1.14	42	41	38
South Dakota	14.2	36	85.1	5	2700	36	15.2	5	0.1	34	1.30	39	24	47
Tennessee	11.9	47	64.1	39	2349	45	20.5	30	7.8	6	1.44	31	55	30
Texas	16.0	24	63.2	41	3199	26	16.3	13	16.8	3	1.39	33	56	29
Utah	15.1	31	75.9	19	2150	50	23.7	33	4.8	11	2.32	9	125	3
Vermont	19.5	8	83.4	7	3783	13	14.0	3	1.7	23	2.75	5	49	35
Virginia	19.2	9	73.7	26	3043	30	16.0	10	0.4	32	2.11	13	63	27
Washington	18.8	10	74.9	22	3437	19	19.6	27	-0.2	35	1.96	16	74	23
West Virginia	10.5	49	72.8	27	2866	33	16.0	10	3.4	18	0.99	46	31	43
Wisconsin	17.9	14	84.0	6	3880	11	16.8	16	4.5	13	1.55	25	108	6
Wyoming	17.2	17	74.3	23	4932	3	12.2	1	-0.5	37	1.85	17	79	19

Please refer to *Capacity Data*: Tables and Sources and the CapacityIndex for further detail on individual variable measures.

Financial Resource Capacity

the Pool of Innovators						Entrepreneurial Awareness		Capital Resources									
Patents per 1,000		University R&D per capita		Federal R&D per capita				Bank Deposits per capita		Dividends per capita		Venture Capital per capita		Loans to Equity		Loans per Worker	
#	Rank	$	Rank	$	Rank	Score	Rank	$	Rank	$	Rank	$	Rank	Ratio	Rank	$	Rank
0.06	39	25.90	37	223	12	0.1	48	5420.3	46	1361	48	0.00	34	2.5	36	3005.5	38
0.05	44	55.21	7	98	25	3.2	1	7621.0	15	1668	39	0.00	34	3.3	24	5023.3	8
0.17	14	42.94	17	143	17	1.3	13	6869.3	24	2286	24	12.10	18	27.0	1	3814.0	21
0.03	48	12.74	49	16	50	0.8	22	6416.1	32	1605	43	0.00	34	2.0	42	3378.1	30
0.20	10	46.70	14	408	6	1.3	13	7412.1	19	2735	6	123.10	3	12.8	5	4361.5	11
0.17	14	51.40	10	195	13	1.5	9	6398.6	32	2492	13	38.30	8	2.8	28	3243.1	31
0.41	2	59.44	5	234	10	2.1	4	7026.8	21	3371	1	103.50	5	10.3	8	3659.8	24
0.45	1	37.95	22	57	30	1.4	11	19829.8	1	2293	22	0.00	34	2.6	34	19856.4	1
0.10	28	17.89	45	105	23	0.8	22	6796.9	26	3300	2	4.40	22	3.6	22	2744.9	43
0.07	37	36.59	24	48	37	0.7	31	6077.6	36	1716	38	4.40	22	4.5	19	3166.2	35
0.03	48	51.26	11	55	34	1.4	11	7964.5	13	2050	32	1.40	32	5.9	11	3213.4	34
0.06	39	20.76	40	258	8	0.8	22	574. 3	41	1893	37	2.00	29	2.9	26	3934.5	16
0.22	7	34.09	27	67	28	0.8	22	8972.0	5	2647	7	62.10	6	5.0	15	6496.2	4
0.16	17	28.90	34	41	39	0.9	19	7017.4	22	2023	34	0.00	34	2.3	40	2937.9	38
0.12	24	45.84	15	52	35	0.7	31	8609.2	7	2618	8	17.90	14	1.3	48	2696.3	44
0.08	33	26.88	36	56	32	1.2	16	8451.8	11	2516	11	17.90	14	2.0	43	3910.7	17
0.08	33	14.44	47	18	49	0.6	38	6543.2	29	1635	41	2.00	29	2.5	37	3861.0	19
0.09	30	28.03	35	26	45	0.9	19	6946.5	24	1655	40	4.40	22	2.8	30	4144.1	12
0.06	39	17.72	46	31	44	1.3	13	4038.0	49	1940	36	0.00	34	3.1	26	2494.4	45
0.16	17	118.46	1	1004	2	0.9	19	6075.3	38	2459	15	31.60	9	3.6	22	2799.1	42
0.27	4	100.15	2	561	3	1.9	6	8505.2	9	2801	5	202.70	1	10.6	7	5555.2	6
0.23	6	33.12	28	55	33	0.6	38	6507.7	31	2128	31	2.70	28	4.9	16	3980.7	13
0.25	5	41.34	19	170	15	1.5	9	8798.2	6	2405	17	18.00	13	4.5	20	5528.8	7
0.02	50	20.14	41	66	29	0.8	22	5580.3	43	1142	50	1.20	33	1.7	44	2274.0	48
0.10	28	32.03	29	138	19	0.8	22	8028.4	13	2509	12	4.00	26	2.6	32	3456.8	29
0.08	33	29.45	31	33	43	0.8	22	7173.6	20	2294	21	0.00	34	2.4	38	4668.4	10
0.07	37	37.74	23	22	47	0.6	38	8500.2	10	2569	9	0.00	34	1.4	47	2815.1	40
0.06	39	20.79	39	524	4	0.7	31	5994.7	40	2342	20	0.00	34	1.4	46	2296.5	47
0.20	10	38.12	21	130	20	2.0	5	6044.4	38	2477	14	0.00	34	2.5	38	2446.2	46
0.39	3	18.69	44	237	9	0.6	38	6955.3	22	3159	3	11.80	19	5.0	13	3485.6	28
0.11	26	70.68	3	1631	1	1.1	17	5652.2	42	1608	42	22.80	10	2.7	31	3638.9	24
0.19	13	53.39	8	176	14	1.9	6	12694.1	2	2928	4	110.60	4	26.5	2	9968.3	2
0.09	30	36.29	25	76	26	0.4	45	5559.4	44	1565	44	1.80	31	8.4	9	3515.4	26
0.05	44	44.60	16	48	38	0.2	47	8599.2	8	2526	10	0.00	34	1.7	45	3756.2	22
0.22	7	24.38	38	141	18	0.8	22	6076.5	37	2145	30	13.50	16	4.6	18	3233.9	32
0.22	7	29.00	33	25	46	0.7	31	7477.9	18	2012	35	3.30	27	2.6	32	4013.3	13
0.14	21	42.36	18	57	30	1.6	8	5016.6	47	2348	19	19.30	11	13.6	4	3935.6	15
0.20	10	38.67	20	112	22	0.8	22	8174.0	12	2250	26	9.80	20	6.1	10	6009.0	5
0.12	24	58.47	6	345	7	2.9	2	7511.5	17	2416	16	183.60	2	14.3	3	4994.2	9
0.09	30	19.86	42	36	41	0.3	46	3781.7	50	1357	49	4.20	25	5.3	12	1910.4	50
0.05	44	12.96	48	20	48	0.6	38	11475.2	3	2215	27	0.00	34	0.7	50	3908.7	18
0.08	33	18.90	43	117	21	0.6	38	6292.5	35	1551	45	0.00	34	3.3	24	3045.6	37
0.14	21	36.11	26	101	24	1.0	18	9301.1	4	2037	33	18.20	12	4.6	17	6756.7	3
0.15	20	61.22	4	152	16	0.7	31	5002.5	48	1364	47	0.00	34	4.2	21	2807.5	41
0.16	17	51.60	9	71	27	2.4	3	6837.6	26	2187	28	0.00	34	2.8	29	3757.6	22
0.11	26	29.13	32	433	5	0.7	31	6530.7	30	2267	25	57.10	7	5.2	13	3229.8	32
0.13	23	47.59	13	234	10	0.1	48	5434.2	45	2364	18	12.60	17	10.9	6	3836.7	20
0.06	39	6.41	50	34	42	0.1	48	6355.7	34	1440	46	0.00	34	1.0	49	2112.3	49
0.17	14	50.30	12	41	40	0.7	31	6628.4	28	2286	23	7.40	21	2.5	35	3126.0	36
0.05	44	31.58	30	50	36	0.5	44	7521.1	16	2171	29	0.00	34	2.0	41	3593.3	26

Capacity Data (continued)

	Physical Infrastructure Capacity						Amenities					
	Transportation		Sewage Backlog per capita		Aircraft Takeoffs		Doctors		Arts Approp'ns per capita		Foundation Grants percapita	
	%	Rank	$	Rank	percapita	Rank	100M	Rank	$	Rank	$	Rank
Alabama	1.8	16	203	17	0.08	41	132	35	27.6	43	1.16	48
Alaska	0.0	1	332	28	1.36	1	129	36	800.1	1	3.88	24
Arizona	1.6	14	175	15	0.25	7	179	17	33.1	38	1.85	37
Arkansas	6.9	32	147	10	0.09	38	128	37	41.3	30	1.25	43
California	1.7	15	162	11	0.26	5	234	5	45.6	27	8.13	8
Colorado	14.4	40	46	2	0.25	7	195	12	29.6	41	7.73	10
Connecticut	0.0	1	542	41	0.17	16	260	4	46.9	24	7.84	9
Delaware	6.5	31	447	39	0.19	13	176	18	80.9	12	13.87	1
Florida	5.4	30	263	24	0.26	5	181	16	88.9	11	1.37	41
Georgia	0.4	10	169	13	0.10	35	148	29	37.7	32	4.80	19
Hawaii	0.0	1	355	33	0.17	16	207	8	215.3	4	3.78	25
Idaho	2.8	21	216	18	0.23	10	111	41	13.7	50	1.24	44
Illinois	0.0	1	339	29	0.13	26	194	13	64.8	17	6.05	14
Indiana	3.3	24	360	35	0.08	41	134	34	33.3	37	5.94	15
Iowa	2.8	21	326	27	0.10	35	132	35	18.0	48	1.44	40
Kansas	20.2	43	268	25	0.15	21	160	24	24.2	44	1.23	45
Kentucky	1.9	17	354	32	0.10	35	142	32	42.0	29	3.12	29
Louisiana	2.8	21	220	19	0.16	18	163	23	31.3	40	1.14	49
Maine	8.1	36	765	45	0.11	31	157	26	36.4	34	3.25	28
Maryland	11.0	38	255	23	0.03	50	283	2	43.6	28	4.09	22
Massachusetts	0.0	1	783	46	0.18	14	287	1	282.5	2	12.60	4
Michigan	26.4	47	345	31	0.13	26	167	21	113.4	7	10.17	7
Minnesota	0.3	8	306	26	0.13	26	196	11	66.0	16	13.43	3
Mississippi	18.8	41	196	16	0.04	49	113	40	18.9	47	1.85	36
Missouri	20.2	43	556	42	0.09	38	171	20	137.9	6	4.72	20
Montana	22.2	45	74	5	0.25	7	132	35	92.1	10	1.22	47
Nebraska	0.9	11	108	7	0.11	31	152	28	37.4	33	1.23	46
Nevada	0.0	1	103	6	0.35	3	147	30	19.1	46	1.57	38
New Hampshire	0.3	8	1,027	50	0.16	18	171	20	33.1	38	4.24	21
New Jersey	3.8	26	607	43	0.12	30	204	9	138.3	5	4.93	16
New Mexico	51.2	50	70	3	0.11	31	157	26	50.1	23	2.06	34
New York	1.0	13	829	48	0.07	47	281	3	248.5	3	13.56	2
North Carolina	7.9	35	168	12	0.08	41	158	25	63.8	18	6.41	13
North Dakota	0.0	1	34	1	0.49	2	142	32	36.2	35	2.90	30
Ohio	2.7	20	409	38	0.08	41	172	19	69.8	15	3.64	27
Oklahoma	32.5	48	120	8	0.18	14	129	36	55.2	21	4.87	18
Oregon	43.6	49	364	37	0.20	12	184	14	16.7	49	6.90	12
Pennsylvania	7.0	33	363	36	0.08	41	200	10	56.5	20	10.21	6
Rhode Island	23.3	46	784	47	0.15	21	213	7	46.2	26	10.96	5
South Carolina	10.9	37	222	20	0.07	47	138	33	78.8	13	1.94	35
South Dakota	7.7	34	136	9	0.14	24	121	38	39.6	31	2.16	33
Tennessee	12.0	39	358	34	0.09	38	163	23	76.7	14	3.93	23
Texas	4.4	28	171	14	0.16	18	154	27	58.0	19	7.40	11
Utah	3.6	25	228	21	0.11	31	164	22	96.1	9	1.50	39
Vermont	2.2	19	511	40	0.14	24	222	6	46.3	25	4.88	17
Virginia	4.3	27	232	22	0.08	41	183	15	34.6	36	3.66	26
Washington	1.9	17	664	44	0.29	4	184	14	51.4	22	2.89	31
West Virginia	20.0	42	975	49	0.15	21	143	31	108.5	8	0.60	50
Wisconsin	4.9	29	344	30	0.13	26	167	21	24.2	44	2.58	32
Wyoming	0.9	11	70	3	0.22	11	120	39	28.3	42	1.29	42

Please refer to *Capacity Data*: Tables and Sources and the Capacity Index for further detail on individual variable measures.

Policy Index Data: Tables and Sources

Subindex One: Improving Governance and Regulation

- *Improving Government Foresight*
  Participation in CSPA's State Scanning Network, 1986.
  Source: Council of State Policy and Planning Agencies, Staff Interview, 1986.

- *Conducting Strategic Audits*
  States Which Have Conducted Strategic Audits, 1985.
  Source: National Governors' Association, "State Economic Development Profiles," Washington, D.C., Unpublished, November 1985.

- *Regulatory Review and Reform*
  States With One-Stop Permitting Systems, 1985.
  Source: Small Business Administration, Office of Advocacy, *Directory of State Business Issues: Looking Toward the Future,* (Washington, DC: S.B.A, October 1985); Small Business Administration, Office of Advocacy, "State Small Business Activities," Updated, Unpublished Table, 1986.

- *Creating a Development Cabinet*
  States With Development Cabinets, 1985.
  Source: National Governors' Association, "State Economic Development Profiles," Washington, D.C., Unpublished, November 1985.

- *Improving Oversight*
  States with a Legislative Audit Offices, 1985.
  Source: National Conference of State Legislatures, "Legislative Program Evaluation in the States," Testimony by Rich Jones to the Joint Committee on Program Evaluation, Salem, Oregon, March 31, 1986.

Subindex Two: Creating An Effective And Equitable Tax Code

- *Tax Climate*
  Business Climate Tax Index Score. Assigned score based on a state's final point total and ranking on the *Business Climate Tax Index.* January 1987.
  Source: The Corporation for Enterprise Development, "Business Climate Tax Index," Literature Review, Economic Climate Project, The Corporation for Enterprise Development, January 1987.

Subindex Three: Mobilizing Capital

- **Reforming Finance Regulations**
- *Statewide Branch Banking*
  States Which Allow Intra-state Banking, 1985.
  Source: Conference of State Banking Supervisors, *Annual Survey of State Banking Statutes*, January 1986, Washington, D.C.

- *Community Reinvestment Act*
  States With Community Reinvestment Acts, 1986.
  Source: National Center for Policy Alternatives, Staff Interview, 1986.

- *Pension Funds*
  States Which Allow Public Pension Fund Investment in Venture Capital, 1986.
  Source: Gini Mitchell, *Social Investing of Public Pension Funds*, Washington, D.C.: National Conference of State Legislatures, November 1986.

- **Insuring Against Risk**
- *Guarantees*
  State With Loan Guarantee Programs, 1985.
  Source: Urban Institute and National Association of Development Agencies, *Directory of Incentives for Business Investment and Development in the United States, Second Edition.* Washington, D.C., Urban Institute, 1986.

- **Creating New Institutions**
- *Quasi-Publics*
  States With Publicly Capitalized Venture Capital Corporations, 1985.
  Source: Urban Institute and National Association of Development Agencies, *Directory of Incentives for Business Investment and Development in the United States, Second Edition.* Washington, D.C., Urban Institute, 1986.
- *Business Development Corporations*
  States with Business Development Corporations, 1985.
  Source: Urban Institute and National Association of Development Agencies, *Directory of Incentives for Business Investment and Development in the United States, Second Edition.* Washington, D.C., Urban Institute, 1986.
- *Loan Funds*
  States with Government Loans Funds, 1985.
  Source: Urban Institute and National Association of Development Agencies, *Directory of Incentives for Business Investment and Development in the United States, Second Edition.* Washington, D.C., Urban Institute, 1986.
- *Business and Industrial Development Corporations*
  States with Business and Industrial Development Corporations (BIDCOs), 1985.
  Source: *Directory of Incentives for Business Investment and Development in the United States, Second Edition.* Washington, D.C., Urban Institute, 1986.

Subindex Four: Enhancing Technology And Business Development

- *Creating Research and Development Centers*
  States Financing Research and Development Centers, 1985.
  Source: Minnesota Governor's Office of Science and Technology, Staff Interview, 1986.
- *Establishing Technology Transfer Programs*
  States with Technology Transfer Programs, 1985.
  Source: Minnesota Governor's Office of Science and Technology, Staff Interview, 1986.
- *Establishing Small Business Development Centers*
  States with Small Business Development Centers, 1985.
  Source: Small Business Administration, Staff Interview, 1986.
- *Creating Small Business Incubators*
  States with Small Business Incubator Programs, 1985.
  Source: Mt. Auburn Associates, Staff Interview, 1986.

Subindex Five: Building and Maintaining Public Works

- *Capital Budget*
  States With Capital Budgets, 1985.
  Source: U.S. Government Accounting Office, *Capital Budgeting in the States*. Washington, D.C., July 1986.

Subindex Six: Investing in Human Resources

- **Strengthening Public Education**
- *High School Graduation Standards*
  States With High School Graduation Standards, 1985.
  Source: Education Commission on the States, *Clearinghouse Notes*, Denver, Colorado, September 1985, November 1985, August 1986; Chris Pipho, "States Move Reform Closer to Reality," *Kappa Special Report*, December 1986, K1-K8.

- *Teacher Career Ladder Plans*
  States Which Have Established Teacher Career Ladders, 1985.
  Sources: Education Commission on the States, *Clearinghouse Notes,* Denver, Colorado, September 1985, November 1985, August 1986; Chris Pipho, "States Move Reform Closer to Reality," *Kappa Special Report*, December 1986, K1-K8.

- *Entrance Testing Certification for Teachers*
  States Which Require Entrance Testing for Certification of Teachers, 1985.
  Sources: Education Commission on the States, *Clearinghouse Notes,* Denver, Colorado, September 1985, November 1985, August 1986; Chris Pipho, "States Move Reform Closer to Reality," *Kappa Special Report*, December 1986, K1-K8.

- *Computer Literacy*
  States With Student Computer Literacy Programs, 1985.
  Sources: Education Commission on the States, *Clearinghouse Notes,* Denver, Colorado, September 1985, November 1985, August 1986; Chris Pipho, "States Move Reform Closer to Reality," *Kappa Special Report*, December 1986, K1-K8.

- *High School Graduation Testing*
  States Which Require High School Graduation Testing, 1985.
  Sources: Education Commission on the States, *Clearinghouse Notes,* Denver, Colorado, September 1985, November 1985, August 1986; Chris Pipho, "States Move Reform Closer to Reality," *Kappa Special Report*, December 1986, K1-K8.

- **Labor-Management Improvement Assistance**
- *Labor-Management Assistance Programs*
  States With Labor-Management Cooperation Programs, 1985.
  Source: U.S. Department of Labor, Labor-Management Services Administration, Staff Interview, 1986.

- **Transfer Payment Investment**
- *Transfer Payment Investment Efforts*
  Investment Orientation of AFDC Programs, 1986.
  Source: The Corporation for Enterprise Development, "Transfer Payment Investment Index," Economic Climate Project, to be released, 1987.

Subindex Seven: Helping Distressed Communities

- *Supporting Community-Based Development*
  States With Community-based Development Programs, 1986.
  Source: National Congress for Community Economic Development, Staff Interview, 1986.

- *Creating Minority Enterprise Programs*
  States With Minority Enterprise Programs, 1986.
  Source: U.S. Department of Commerce, Minority Business Development Agency, Staff Interview, 1986.

- *Expanding Employee Ownership*
  States With Employee Ownership Assistance Programs, 1986.
  Source: National Center for Employee Ownership, Staff Interview, 1986.

- **Establishing Rapid Response Teams**
- *State Rapid Response Teams*
  States Which Have Established Rapid Response Teams, 1986.
  Source: National Governors' Association, Staff Interview, 1986.

- *DOL Project Participation*
  States Participating in Demonstration of Canadian Industrial Adjustment Service Program, 1986.
  Source: National Governors' Association, Staff Interview, 1986.

All per capita population calculations were made by The Corporation for Enterprise Development.
Source: 1985 population, Bureau of the Census, Press Release 12/27/85.

Policies Data

	Governance and Regulation					Taxes		Capital							
								Regulations			Risk	Creating New Institutions			
	Fore-sight	Audits	Regu-latory	Cabi-net	Over-sight	Climate Rank	Climate Score	Branch Banking	CRA States	Pension Funding	Guaran-tees	Quasi Publics	BDCs	Loan Funds	BIDCOs
Alabama			X			43	1	X							
Alaska				X	X	37	2	X							
Arizona		X			X	12	4	X							
Arkansas		X				38	2			X			X		
California		X				1	5	X		X	X			X	X
Colorado	X		X	X	X	11	4								
Connecticut			X	X		34	2	X			X	X		X	
Delaware			X			15	4	X							
Florida	X	X		X	X	33	2							X	
Georgia				X	X	26	3						X		
Hawaii		X			X	9	5	X		X				X	
Idaho				X	X	19	4	X							
Illinois			X	X	X	31	2							X	
Indiana		X		X		15	4		X		X	X	X		
Iowa		X	X	X	X	25	3			X			X		
Kansas			X		X	35	2			X			X		
Kentucky			X		X	10	5							X	
Louisiana		X				23	3				X			X	
Maine		X	X	X	X	5	5	X			X	X			
Maryland				X	X	2	5	X			X			X	
Massachusetts		X		X	X	13	4	X		X		X	X		
Michigan		X	X	X		3	5		X	X	X	X		X	X
Minnesota	X		X	X	X	7	5			X	X			X	
Mississippi				X	X	29	3				X				
Missouri	X		X	X		36	2				X			X	
Montana		X	X		X	41	1				X		X	X	
Nebraska	X				X	32	2						X		
Nevada		X		X		46	1	X		X			X	X	
New Hampshire						50	1			X			X	X	
New Jersey	X	X		X		40	2	X			X			X	
New Mexico				X		18	4						X		
New York		X	X	X	X	23	3	X					X	X	
North Carolina					X	28	3	X	X						
North Dakota	X	X				44	-1						X	X	
Ohio		X	X	X	X	8	5			X	X			X	
Oklahoma	X	X			X	39	2								
Oregon		X	X	X	X	30	3	X		X			X	X	
Pennsylvania	X	X	X	X	X	14	4			X			X	X	
Rhode Island		X			X	17	4	X					X	X	
South Carolina		X		X		6	5	X					X	X	
South Dakota			X	X		49	1	X							
Tennessee				X		48	1								
Texas				X	X	46	1							X	
Utah			X		X	27	3	X							
Vermont			X	X		42	1	X		X	X			X	
Virginia		X	X		X	21	3								
Washington		X	X	X	X	21	3	X							
West Virginia		X	X		X	20	4							X	
Wisconsin		X	X		X	4	5		X	X				X	
Wyoming				X	X	45	1			X	X		X		

Please refer to *Policies Data:* Tables and Sources and the Policies Index for further detail on individual variable measures.

Technology & Business				Public Works	Investing in Human Resources							Community Distress Assistance				
					Public Education					Labor	TPI				Rapid Response	
R&D Centers	Tech Transfer	SBDCs	Incubating	Public Works	Graduation Standards	Teacher Ladders	Teacher Testing	Computer Literacy	Graduation Testing	Labor/ Management	Transfer Payments	CDC Programs	Minority Enterprise	Employee Ownership	Rapid Response	DOL Project
	X	X			X		X				2		X		X	
				X							3					
	X			X	X		X				4				X	
X	X	X	X	X			X				1		X		X	
X				X	X		X				5		X	X	X	
				X			X				3		X			
X		X		X			X				5		X	X	X	
		X			X		X				3		X	X		
X		X		X	X		X		X		4	X	X			
X		X		X	X		X				2		X			
X				X	X	X	X				2					
		X		X							1				X	
	X	X	X	X			X			X	4		X	X		
	X		X			X	X				2		X			
X	X	X									3		X			X
X		X	X				X				3		X		X	
X		X		X	X		X			X	2		X		X	
		X	X	X		X	X	X	X		1		X			
		X					X	X			5			X		
	X	X		X	X						5		X	X		
X		X					X				5	X	X	X	X	
	X	X	X	X		X				X	5		X	X		X
X	X	X		X		X				X	5	X	X			
X	X	X	X		X		X				1				X	
X	X	X	X	X			X		X		3		X			
	X			X		X	X				3					
X		X		X			X				4		X			
		X			X	X					1					
		X		X			X	X			1	X		X		X
X	X	X		X	X		X				5		X	X		X
X	X			X			X	X			3		X			
X		X		X	X		X				5		X	X		X
X		X	X	X	X		X				1		X		X	
	X	X				X					2					
X	X	X	X	X						X	4	X	X			X
	X	X				X	X				4		X			
	X			X			X				4			X		
X	X	X	X	X					X	X	4		X	X		
		X		X							4		X			
				X	X		X				2		X		X	
		X	X	X			X	X			2		X			
X				X	X		X				1		X		X	
X	X	X			X		X		X		4				X	
X		X		X				X			3				X	
	X	X		X		X			X		5			X		X
X		X		X			X		X		3		X			
X		X		X			X				4		X		X	
		X				X	X			X	2		X	X	X	
X		X		X	X						5	X	X	X	X	
		X		X		X					1					

Appendix B: Toward a New Economic Climate Index: A Research Note

This index is a first attempt to create a framework for understanding and quantifying the processes and variables of sustainable economic development.

The purpose of this note is to clarify the methodological and research issues and judgments confronted in the process. It discusses, in order, the purposes, theoretical underpinnings, and process for developing the index. It then addresses the general limitations of index-building, specifically considers methodological issues confronted on each of the four indexes and suggests priorities for further research. It does not discuss the reasons why all measures were chosen or why hundreds were rejected. Nor does it discuss specifically the strengths and weaknesses of each measure. Instead, we present the general issues.

Although the index itself is exploratory and the measures at times inexact, the perspective on the nature of economic development that underlies the various measures is not tentative. The fact that CfED's index is still in the process of development does not lessen the need for -- and the usefulness of -- a concrete alternative to the dangerously misleading indexes of business climate currently in use.

This index organizes what we know so that we can make better use of that knowledge. It also identifies what we don't know so that we can begin to gain that knowledge. The fact that this first effort is necessarily imperfect in no way undermines the importance of building from where we are. But building requires the candor that this note is meant to supply.

Purpose of the Research

CfED has conducted research, analysis and investigation designed to answer the following questions:

- What is wrong with traditional conceptions and measures of business climate?
- What are the goals of economic development?
- What are the most appropriate measures of a state's economic performance, consistent with the goals of economic development?
- What are the key dynamics and primary determinants of economic performance in today's complex and changing world?
- What are the most effective state policies for improving economic performance?

The Theoretical Framework that Guides the Development Report Card

A theoretical foundation lies beneath all research efforts. Development economists who propose policy interventions inevitably base their proposals on particular models of how firms grow and how the development process works. These models, whether they are made explicit or remain implicit, guide the choice of hypotheses and research methods and the interpretation of data.

Our index is no different. Behind the measures and the numbers lies a theory about the preconditions of economic development and the purposes of development policy. Our position is based upon two central theses:

- Development, at its core, centers on people. GNP, inflation, income multipliers, and supply/demand curves are all abstractions. It is important to look beyond the charts, numbers, graphs and formulas to get to the basis of production and exchange: people.
- Investments in the talents and visions of ever-larger segments of our population is the key to the long-term health of our economy and ultimately the welfare of our society. This is increasingly true in a world economy where flexibility, resilience, innovation, and speed in adaptation to new trends and opportunities have become fundamental to business success.

The model that derives from these ideas and from our understanding of the development process and determines the four-index structure of the Development Report Card is simple:

- What we seek from an economy is long-term, widely-shared increases in our standard of living (tangible and intangible).
- The economy's *performance* largely results from the *vitality* of the business community, which organizes and manages most economic activity. Business vitality is rooted in competitive edge, diversity, market strength, long investment horizons, as well as the ability of new firms to start up and older ones to innovate and adapt.
- Business vitality springs from effectively using and augmenting the building blocks of development: finance, human skills, technology, natural resources and amenities. We call these development ingredients a state's *capacity*.
- Government *policies* can foster or undermine performance, capacity and vitality, thereby leading to stronger or weaker economic performance.

Given the complexity of the development process, it is impossible to model a state's economic development process with much precision. Because of the novelty of the science and art of development, we cannot set forth a comprehensive econometric model of how various inputs and performance measures relate to each other -- for example, we can't know that by investing so much additional money in education, we will gain a certain percentage in growth; or that with this many more high school graduates, business incorporations will go up by a certain percentage. Moreover, many of the performance measures (outputs) are critical ingredients (inputs) to the development process itself. Improved quality of life, for example, is both a critical input into the development process, since it is an important factor in business investment decisions, as well as a product of earlier development.

Since this is not an econometric study examining the precise relationships between different variables and different performance measures, inconsistencies appear across performance measures, and between each of the subindexes. Our model does not imply that states strong in one area of performance or capacity will be strong in all others. The complexities of the causal relationships within states and the outside world, the differing economic histories and evolution of each state, and the time lags of today's private and public actions make that type of symmetry a virtual impossibility.

For this reason, as well as two others, our present model is largely descriptive and qualitative rather than statistical and quantitative. Much of the data relevant to our theoretical approach is currently unavailable. In addition, we made a conscious decision to focus on the problems and the dynamics we consider most important and decisive, regardless of whether the supporting data is available in precise statistical form. To a large extent, we let our concerns determine our data rather than allow our data to determine what problems to analyze.

Though we have yet to develop a more rigorous economic model, we did have a clear and distinct model of development that informed our work. We believe we have constructed a series of indicators of development ingredients, processes and results that can prove useful to public and private institutions in finding their way through today's largely uncharted economic terrain.

The Development of the Index

This index culminates a long process involving extensive research and analysis. Although, with a few exceptions, no new empirical studies were completed, the research team critically examined the key literature on a range of subjects related to state business climate.

The project began with a critique of the Grant Thornton index, one of the most influential attempts to measure the attractiveness of a state to the business community. This critique addressed the following questions:

- Do states that rank high on the Grant Thornton index outperform lower-ranked competitors?
- How does Grant Thornton determine which factors are most conducive to a positive business climate?
- How are these factors weighted in their analyses?
- How does the Grant Thornton index differ from ones constructed by the Southern Regional Council, SRI International, the Southern Growth Policies Board and Inc. magazine?
- What lessons do Grant Thornton and these other indexes provide for constructing an alternative?

Next, we took a critical look at the literature on both the building blocks of development and the obstacles to economic growth. This required extensive literature reviews on: entrepreneurship, taxation, industrial location, service sector development, high technology, foreign investment, environmental regulation, labor-management relations, workers compensation, human capital, infrastructure, capital markets, plant closings and disinvestment, and more. (See Appendix C.) In addition, we commissioned original statistical research on the impact of unions on state economic growth.

This set of inquiries sought to answer a range of important questions:

- What activities and resources stimulate and support job creation, entrepreneurship, and economic development?
- Do unions, high taxes, environmental regulation, and worker compensation rates constrain the development process, in what way and to what extent?

- What are the roles of financial capital, physical infrastructure, labor force skills, and education in long-term development?

- How do firms make industrial location decisions? What factors are most important to different types of firms in different industries?
- What lies behind the boom in services, high technology, and foreign investment?

- What roles have state governments played in fostering economic development? What has proven effective (or at least promising)?

In conducting this research, we received help from advisory boards representing businesses of different sizes and sectors, labor unions, community groups, economists and state development practitioners. We also drew upon our own extensive experience as state policy consultants in the fields of development finance, economic adjustment, small business assistance, welfare and employment policy, and community economic development.

Finally, we constructed a set of indicators and indexes that captured variations in state economic performance, potential and policy. We have resisted the temptation to construct one quantitative index that would enable us to rank all the states from one to fifty. Although this summary short-hand approach captures the public imagination and proves easy and dramatic to publicize, it also unduly telescopes the very complex process of development into a single ranking system that means little for those more interested in strengthening their state's economy than in capturing newspaper headlines. We chose instead to construct four separate indexes to provide benchmarks for evaluating the separate, but related, dimensions of state economic performance, capacity, vitality and public policy. Though we recognized this would also distort some, grades have the advantage of attracting attention and guiding that attention to these four most important dimensions.

In choosing to develop several quantitative indexes, we are well aware of the pitfalls. To avoid any intimation that we claim more for this research than is fair and appropriate, it is important to address these limitations and caveats in advance. The most important problems can be listed as follows:

Inadequate data

Much important statistical information is currently impossible to gather and present in clean, comparative fashion. For example, we do not know how many "good" jobs were lost in each state and how many "bad" ones were created. Our figures on the number of "working poor" are our imperfect proxy. Indirect sources of data derived from content analyses are used in lieu of solid data on entrepreneurial culture.

The data were also not consistently from the same time frame. We used the most up-to-date information available. Since the most recent data available for many variables was the end of the year 1985, this was the period used most frequently. However, some of the data, particularly the variables derived from the 1980 U.S. Census, and the 1982 Business Census are slightly more dated.

The danger of extrapolation from short-term trends

Forecasting is always tough. Simply because a trend is established for a time does not mean that it will continue. Many of the variables capture a point in time, either one year or a trend of a short time period. The figures reflect the varying effects of changes in the U.S. economy. For example, the loans-to-deposit ratio in states with large agricultural and energy industries are low in 1985. This is not to say, however, that the banks in these states are generally unaggressive in their lending policies; undoubtedly, slumps in those two sectors stifled lending.

The difficulty of modeling the real world

The real world is a messy place of complex interrelations. It is often difficult to separate cause and effect. For instance, an unemployment problem in a state may stem from a single "sick" sector. The rest of the state economy could be robust and changing for the good. The complicated linkages in society and the economy mean that no statistical measure is completely untainted. To take one illustration: low loans-to-deposit banking ratios may be related to dominance of a large manufacturing firms, such as automobiles, which bring their own financing from large out-of-state finance institutions. Some measures can be applied only to select states. Inevitably, the data contains a lot of "noise," making definitive conclusions difficult and often dangerous.

The problem of time frame

Traditional economic theory has trouble figuring out when the short-run ends and the long-run begins. How long is the long-run? Cause and effect have varying and lead and lag times that are hard to discern. How long should we wait before we evaluate the effectiveness of policy interventions? How fast can we expect improvement in a state's economic performance as a result of intervention? How long must an economy be in the doldrums before it is clear that its problems are structural, chronic and long-term?

States function in a larger economic context

States differ greatly in their industrial structures. At times, this creates anomalies in comparative analysis, penalizing some states and rewarding others. These structural variations also lead to differential impacts on states by the national and global economies. Thus, a state could pursue sound economic policies, but have its impact undermined and negated by forces beyond the control of state private or public actors and institutions. Hence, measuring the effectiveness of policies or blaming state performance on state policy-makers can be risky.

States are composed of smaller regional economies

There are a host of differences within states. State economies usually comprise a cluster of smaller regional economies. Consequently, statewide measures frequently distort economic conditions in different parts of the same state. Thus, any statewide number we identify as important should be looked at more closely to see if it is really a characteristic of the state as a whole.

Qualitative measures

An index underplays the importance of qualitative factors that cannot be adequately quantified. This is a particular problem in the area of economic development, since so much of what is important to success can not be measured. How does one measure quality of life? The quality of public management? The quality of private sector managers? The attitudes of the financial community?

The problem of ranking

Finally, serious difficulties arise in trying to assign the proper weights to different factors, and in attempting to rank-order the states. To begin with, there exists no commonly agreed-upon, statistically-derived model that can be used as a blueprint for analyzing state economic development. What are all the factors that drive economic growth? Can they be isolated? And can correct weights be assigned to each? For instance, would "x" more dollars in education and training investments lead to more growth that the same amount of investment in physical roads and bridges? It is almost impossible to know.

Index Construction

We attempt to set forth the construction of the four indexes here. The first three indexes are similar in that they group numerical data. Our approach in developing them was also similar. It is discussed in general below, and then specifically for each index. The construction of the policy index was significantly different, and is discussed by itself.

Each of the numerical indexes is based upon a series of subindexes. The number of subindexes which form a final chapter index varies. The Performance Index has five subindexes -- income, employment, equity, quality of jobs and quality of life. The Vitality Index has two subindexes -- competitiveness and entrepreneurial energy. The Capacity Index has four subindexes -- human capital, financial resources, infrastructure and amenities. Each of the indexes and subindexes are categories crafted on the basis of the determinants of economic development we analyzed in our literature reviews.

The subindexes are created from the individual variable measures like life expectancy or the unemployment rate. Each subindex has between two to six data variables. The method of deriving a subindex score is as follows:

- Variable data (the "score") was collected for each state. The best score received a ranking of 1. When a tie occurred, both states received the same ranking. The next state then was ranked as if a tie had not occurred. For example, if the two best ranking states had identical variable scores, they both received a rank of 1, and the next state was assigned a rank of three.

- To compile a subindex, each individual state's rank for the variable measures were all added together. This ranking total is the subindex score. Subindex scores were then ranked from 1 to 50. Ties were treated by the same method as for individual variable measures.

- Creating a final chapter index involved a process very similar to creating the subindexes. State ranks on each subindex were, as in the creation of subindexes, added together. The resulting scores were then ranked from 1 to 50.

Thus, the final index is composed of the rankings from the subindexes rather than the rankings of each individual data variable (such as life expectancy). We were satisfied that the subcategories were of equivalent importance; we were not convinced all the measures had equal importance.

Assigning weights within each index to subindexes (for example, equity, income, etc.) is at this time largely arbitrary. We felt that the simplest and least potentially misleading technique would be to assign equal weights to subindexes in two chapters, performance and vitality. For example, in the performance index there are five subindexes. Therefore, each subindex has a weight of 20 percent. Here, we thought that the goals of development were well represented by weighing each objective equally, while in vitality it also seemed that entrepreneurial energy and competitiveness were equally important to growth. Individual data measures, consequently, have different effective weights, depending on the number of variables which compose a subindex.

In the Capacity Index, the human capital subindex was assigned a weight of 50 percent. This seemed to be a valid conjecture given the comprehensive nature of the measure, including everything from high school to high tech, and given the research by Edward Denison and others on the considerable effect of human capital improvements on economic growth between 1929-1982. Due to the importance of a state's wealth and investment, the financial resources subindex was weighted at 25 percent, while the other two subindexes -- infrastructure and environmental amenities -- were assigned weights of 15 percent and 10 percent, respectively. Infrastructure was weighted more heavily since the development literature is much clearer on the degree of impact that a good infrastructure has, than it is on good amenities; for both subindexes, the quality of the measures was less than we would have liked, and therefore weighting was slighter than it might otherwise have been.

I. Performance

Methodological Issues

Since economic development is fundamentally a matter of choices, of values, and of vision, much of the controversy over growth and job creation options is muddled by the failure to clarify what we hope to achieve. This is an intrinsic problem of most policy developed in the name of economic development. Policy-makers in particular often fail to ask such important questions as: Who do we want to help? Do we care only about creating jobs, or do we also care about what types of jobs are created and who gets them? Do we care only about expanding income and wealth, or do we also care about the distribution of that income and wealth? Should development encompass concerns about the quality of life?

To answer the preceding questions, we define performance broadly to encompass the many goals that our society is trying to achieve. These measures were chosen to sharpen and focus debate in the field on these goals. We sought to clarify that the ultimate purpose of economic development is to improve the quality of life of all of the citizens of this nation. We constructed our measures accordingly. They are designed to capture differences in economic well-being, quality of life and distributional equity; that is, to measure the performance of a state's economy in reaching the goals of a richer and better life for all the state's residents.

The performance measures were chosen to provide a sense of both overall economic performance and measures of equity and quality of life. There are two major methodological limitations with the performance measures:

- To get a real sense of the overall level of economic well-being, per capita income figures should be controlled for the cost of living in an area. For example, to maintain a middle-class standard of living in some states will cost significantly more than in others. Unfortunately, most cost-of-living data is collected only for metropolitan areas, and there is wide divergence in cost of living within each state (for example, compare the cost of living in the New York metropolitan area with that of Buffalo).

- Quality of life, one of the most important performance measures, is extremely difficult to quantify. We tried to locate measures based on public opinion surveys of how people perceived the quality of life, on the assumption that in many ways perception is reality in this area. However, we were unable to locate adequate studies that separated data by state. A comprehensive quality of life index also should include innumerable measures, covering everything from the cost of housing and the quality of health care to the climate and level of physical amenities. To adequately cover this issue would require a book in itself.

Further Research

Obviously, states that come up short on some of our performance measures need to look deeper and see better the shape of the problem. Is the problem of unemployment concentrated in certain sectors, occupations, or regions? Do a state's unemployed share common problems or barriers? Or, do they differ greatly and systematically by skills, race and gender? By examining more closely these sorts of questions, policymakers and researchers should better understand the causes and scale of their development challenges.

Research is needed in other areas as well. There has been an ongoing debate about the meaning of unemployment figures. We know from other studies that these numbers both under- and overestimate hardship. Better methods of measuring and assessing employment and unemployment-based distress are desperately needed. The issues of underemployment and job quality also require further analysis. We know that the number of "bad" jobs seems to be growing, but we do not know what the patterns are and the reasons for any of these on a state-by-state basis. Likewise, we lack solid figures on the number of dislocated workers and plant closings in each state. And despite the growing evidence concerning the role a state's amenities can play in promoting development, we possess only poor methods of measuring it on a statewide and substate basis. Income figures are old (1980 or 1982). We would have liked to include a measure of women's wages as a percentage of men's, which we consider an important equity measure in this economy, but felt the data was too old to be very helpful.

Finally, we need measures to control for the cost of living in an area. For example, the high per capita income in the state of Alaska may be a reflection of the high cost of living in that state rather than the well-being of the residents.

II. Business Vitality

Methodological Issues

The goal here is to identify and measure the relative health of firms at different points in the business life cycle, that is, start-ups, expansions and mature firms -- and to measure the regenerative capacity of the economy through the levels of self-employment and business ownership among groups often excluded from the economic mainstream.

These measures, more than many others, reflect the existing industrial structure in the state. For example, data on capital expenditures per industrial worker only include the manufacturing sector, and, here, are biased towards states with capital-intensive industry. Since this data is only available through the Census of Manufacturing in 1982, it is also dated and reflects a period of severe economic downturn in many states.

Incorporation and self-employment rates provide a sense of the amount of new enterprises being developed and the entrepreneurial activity in a state. However, be aware that many professionals (for instance, doctors, dentists and therapists) have incorporated for tax purposes, and thus incorporation rates could reflect the level of professional employment in a state. To deal with these problems, we instead used business formation data from *Inc.* magazine based on the work of Cognetics, Inc. Yet this data also has flaws, because it is based ultimately on Dun and Bradstreet data, which is not collected for research purposes and is of uneven quality.

Four variables that were important to the vitality measure were left out because of data collection problems. First, the level of local ownership in the economy was not included. Previous research has provided evidence that locally owned firms are more committed to their communities and more likely to sustain themselves during economic downturns. One can presume that a state whose economy is characterized by locally owned firms as opposed to branch plants, would therefore have a more stable and vital business community. We were unable, however, to uncover usable data on this issue.

The second variable excluded was the level of diversity in the economy. The assumption here was that states that were overly dependent on a few industries would be more vulnerable than those with more diversified economies. In a sense, diversity could be used to measure the long-term competitiveness of the overall economy. Although various researchers have tried to develop statewide diversity measures, none were found to be suitable for the purposes of this project.

Third, although we believe that productivity is an important measure of an economy's competitiveness, we found that statewide measures fail to account for differences in industrial structure and would, therefore, be very misleading.

Fourth, the keys to remaining competitive in the new economic environment involve the ability of larger and more mature firms to adapt to change and innovate, both in the development of new products and new production processes. Although some measure of this is included in the capacity sections (for example, patents per capita) these inadequately reflect the importance of innovation to competitiveness. Other useful measures that were available on a state-by-state basis and that reflected innovation by industry were not identified.

Further Research

Business vitality is an important, but somewhat elusive, subject. For instance, the job creation by firm size data used in our study is based ultimately on information collected by Dun and Bradstreet. The data on each firm is not acquired for the purpose of research; hence, it appears marred by a pattern of errors that prevent it from being the ideal data base for measuring the amount of jobs generated by big and small firms. Though researchers could tap ES 202 data collected by the Employment Service of the U.S. Department of Labor to construct an alternative data base, issues of confidentiality restrict use of this data source.

Some would argue that business vitality measures focus excessively on the entrepreneurial, innovation, and business formation aspects of development at the expense of concern with the job loss and generation of high-quality jobs. Yet other researchers and policymakers could argue the opposite. They would say that there is a natural process of firm decay and job loss, and the best way to deal with it is to increase the number of formations and let the natural process of firm growth replace the loss of jobs; over time, as some of these enterprises grow, job quality will improve as well. To date, there is no way of resolving this debate.

It is also necessary to find new ways to appraise the robustness and vitality of large firms. Adoption rates of new technologies and innovation audits that separate out state characteristics are two measures we looked at that might, with time and effort, be developed into usable means.

Finally, we need to better understand the contribution of an "infrastructure" for development in poor communities. A measure of the extent of community development organizations and the like might be in order.

III. Capacity

Methodological Issues

These indicators measure factors essential to achieving the goals of shared and sustainable growth. The index evaluates not only the stock of resources in a state, but also how well the state's resources are used. Measures of human resources, financial resources, physical infrastructure and amenities are included.

In all of these measures there were shortcomings in trying to measure quality of resources versus quantity. This was particularly true in the case of human resources. It is one thing to say how many people in the state received a high school education; it is quite another to compare the quality of that education. Vast differences in quality do exist from state to state. While some analysts often use average ACT and SAT scores to analyze quality issues, we found this inappropriate, since comparisons can not be made between all states (22 state offer ACT and 28 states SAT). In addition, these scores reflect largely the work of college bound students -- and thus, to a great extent, they represent only one demographic group.

The other limitation to the human resource measures is that the most up-to-date information on the educational attainment of the existing labor force is from the 1980 Census. This information is now very out of date, and new information will not be available for some time.

In terms of financial capital there are at least three important limitations. First, there are serious data limitations. Although the Federal Deposit Insurance Corporation requires that all commercial banks report the amount and type of loans they make, they do not require that banks report *where* they make these loans. In some states, commercial banks may have a relatively high level of commercial and industrial lending; but given the increasing mobility of capital, many of the borrowers can be located in other states. Second, the environment of the financial markets differs from state to state. In some states, there is a generally aggressive culture, with investors and bankers willing to take risks. In others, there is a more reserved, conservative approach to the lending process. Capturing this culture is very difficult through a few quantitative measures. Third, there is no reliable data on the availability of critically important "informal" seed capital.

Although studies have showed the importance of physical infrastructure to economic growth, there is an amazing lack of information of the nation's physical infrastructure. Problems in measuring the quantity and quality of the infrastructure around the country is an issue of increasing debate and concern. Although data on expenditures for roads and bridges, and the quantity of paved highways are available, these were not used because they so closely reflect the size and geographic conditions in a state. In addition, measures of the "new infrastructure" for development (for example, telecommunications) are also important.

Further Research

A number of major nonprofit and governmental organizations are updating education statistics to obtain better information regarding the quality of instruction. Their efforts should be strongly supported and we eagerly await the new data.

Efforts to quantify quality of life were introduced as early as 1929, but most of the development of the concept as a body of knowledge resulted from research by the federal government between 1960 and 1976. Since 1980, though, little new research has been conducted. As a consequence, statistical quality of life compilations on a state-by-state basis are scarce. Researchers should search for new measurement tools, especially in the areas of health, arts, nonprofits, charitable activities and the environment. In addition, better theoretical work on the role of amenities in growth and improved measures of subjective satisfaction are needed.

Finally, developing better measures of availability and utilization of capital at critical points in the firm life cycle are important.

IV. Policy

The Policy Index is different from the others. It measures the presence or absence of critical programs, and is, therefore, in large measure, a level-of-effort index, rather than a numerical measure of quality. The index assesses the public sector's level of activity in encouraging and promoting sustainable development. It considers overall governance, human resource policy, financial regulation, public development banking, infrastructure investments, tax policy, distressed area policy and the quality of services to businesses. Obviously other policies have an impact on economic development, but these have the most direct influence. The following explores the evaluation issues that arose when devising these measures.

Difficulties in Establishing Performance Standards

What programs are best equipped to meet our development needs? And what are the standards for judging the performance of various programs?

These are tough questions, without easy answers. A legion of difficulties make it difficult to thoughtfully and easily appraise whether a government program is doing its job. The central dilemmas are:

- *The Data Base*

Adequate and accurate longitudinal data is essential for effective evaluation. Often the required information is not collected on a systematic basis, is incomplete, or is not comparable to data collected elsewhere. In addition, the data on many programs often is not collected by disinterested, outside parties; that is, there often is no corroboration from outside sources. This raises the issue of reliability. Moreover, many programs that appear to be both innovative and promising are often so new that there is a complete lack of data.

- *The Problem of Outcomes vs. Impacts*

In evaluation research, "outcomes" usually refer to short-term results of programs, such as jobs created or wages paid or level of education achieved. "Impacts" usually refer to longer term results, including lifetime earnings. Ideally, a researcher concerned with whether a program contributes to sustained economic development should focus on "impacts." However, impact assessment requires more sophisticated controls, data, and longer time frames than were available to us. Constraints on both time and resources, as well as data availability, often force researchers to focus on "outcomes."

- *The Problem of Prediction*

The complex factors involved in social problems and their causes nearly defy totally accurate or complete explanation. For example, a given program may successfully equip individuals with the skills necessary for adjusting to a changing economy and increasing their economic well-being, but a change in the business cycle or the extinction of the program itself can wipe out this progress. Hence, predicting future success of programs or explaining past failures is problematic, given difficulties in accounting for external environmental forces.

- *The Problem of Attribution*

Social science has yet to find an accurate way to attribute a particular change to an organization or program. In other words, in assessing programs it is worth remembering that establishing direct cause-and-effect relationships remains extremely difficult.

- *The Problem of Measurement*

A central dilemma of research is deciding what to measure. Current literature suggest a number of items, including inputs, process, direct effects, indirect effects, net effects, and impact. Some may be easier to measure than others; in any case, they may not always tell us what was specifically accomplished.

- *The Problem of Standards for Performance Measures*

Determination of the standards through which programs are measured are at the heart of evaluation and criteria construction. Different functions probably will require different measurement standards. Options include measurement against legislative goals, organizationally determined goals, cost-effectiveness criteria, management efficiency and development objectives. Thus, analysts must be careful to specify not only which functions are being measured and at which level of the economic development process, but also what standards of performance are being used. Equally important, the same standards may not be applicable to all programs and activities. When dealing with activities directed toward reducing poverty, we must use different criteria for success than, say, address the problem of university-business technology linkages. Since most community development corporations, for instance, operate in an environment characterized by failure and tremendous business barriers, it is unreasonable to expect immediate and dramatic success. Finally, it may sometimes be necessary to judge programs according to well-developed theoretical guidelines, particularly when data is difficult to obtain.

- *Policy Lags*

It takes some time before the effects of government programs are known. For example, efforts to turn around a declining Midwest community long dependent upon a traditional economic base will not succeed or fail overnight. Premature appraisals of programs whose intent is long-term in nature will present misleading results.

- *Novelty*

Most of today's government initiatives in the development field are of very recent vintage. Few have been operated more than five years. Most are based on earlier precedents that are not much older. Given the novelty of this entire area, the jury remains out on many of these strategies.

- *Different States, Different Needs*

Often government programs are appraised with no attention to whether the tool is appropriate to the state's problem.

Resolving the Problems

Despite these difficulties, several promising developments await. The empirical and theoretical literature in economic development has grown rapidly in recent years. A great deal of evidence exists that begins to establish some of the conditions for certain types of investment decisions, some of the reasons for the growth of such new sectors as high-tech services, and some of the barriers that may hold back an area's development potential. Much of this literature, along with the recent evaluations of longer-running programs, suggests types of policy strategies and program options that should be explored.

In addition, we can establish some useful screening criteria to help us sort through the enormous variety of programs that states are currently implementing. For example, in examining the state record, we tried to apply the following standards:

- *Magnitude of Outcome:* The best programs should have a significant impact on some measurable outcome -- or, at the very least, suggest the possibility of having such an effect. The actual outcome could be measured through such indicators as the number of jobs created, number of trainees placed, percentage reduction in dependency.

- *Leveraging:* All other things being equal, the more private and other public funds leveraged, the better the program.

- *Cost-Effectiveness:* The best programs should utilize resources in an efficient manner. The cost-effectiveness of a program might be gauged by outcomes as cost per unit of output -- for example, the cost per person trained, etc.

- *Long-Term Impact:* The best programs should have a long-term impact -- such as making a lifetime change in a person's earnings ability or equipping them with the skills necessary to adjust to a changing economy, or developing university-government partnerships with the potential to have a durable impact on the direction of regional economies.

- *Effect on Equity:* Programs that purport to contribute to shared economic growth should be assessed in terms of equity outcomes. Specifically, the outcomes of such programs should be shared and should not be regressive in nature.

- *Ability to be Implemented:* The best programs should be relatively easy to understand and implement. Excessively complex programs are bound to suffer from both lack of public support and implementation difficulties.

- *Impact on Barriers Impeding the Economic Development Process:* Programs should be assessed in terms of the degree to which they address key barriers to economic development. This strategic dimension is quite important. For instance, capital market imperfections often make it difficult for various communities and individuals to become involved in the economic development process.

- *Ability to Empower Communities and Individuals:* Enabling communities and individuals to effectively shape the economic development process is another performance standard by which some programs can be assessed. Such programs might take a wide array of forms, ranging from tenant-managed public housing to comprehensive support to community development corporations.

- *Political Pragmatism:* Some programs can be assessed in terms of whether it is politically feasible for them to be fully implemented.

- *General Applicability:* Given the purpose of this index, it is crucial to focus on categories of programs that were generally appropriate to all states. In contrast, the specific ways of, say, leveraging private investment, will differ greatly from state to state. In addition, we focus on policy areas that showed a responsiveness to the changing conditions and challenges of today's economy and that tried to build in a tolerance and openness to these new circumstances.

Obviously, not every program measure we evaluated received high marks on each of these. For example, successful university-business partnerships to develop new technologies do little to expand economic opportunity. Likewise, limited efforts to support neighborhood organizations in low-income inner cities will have no known effect on changing our trade balance. Yet both of these types of efforts are crucial pieces in a comprehensive state development policy mosaic, and both play a role in fostering shared and sustainable increases in quality of life.

Selecting the Policy Areas, Picking the Measures.

The following policy areas were selected:

- Improving governance
- Mobilizing capital for business development
- Developing new businesses and new technologies
- Building and maintaining public works
- Investing in human resources
- Helping distressed communities
- Creating an equitable and efficient tax structure

In each case, we organized the discussion in this fashion. We began with an examination of why it is important. Next, we laid out the major objectives of this policy category. Following this, we discussed the policy direction that states might undertake to address the objective, as well as the specific measures. The measures were particular programs for which there was some evidence of effectiveness. We did not appraise the quality of programs in each state, but instead simply identified whether or not those programs existed. No subindex scores were used in this index. An index was constructed by adding up the number of programs in all areas, except for taxation and transfer payment investment (TPI).

For transfer payment investment and tax policy, many more dimensions were considered. We instead converted the final ranks from individual TPI and Business Climate Tax Indexes into five levels, running from top to bottom. The top scorers got five points, while each successive grouping received one less point. We then added these points to the other program initiatives.

Further Research

First, we would like to add to our policy index the role state policies play in investing in and maintaining the natural resources base. Agriculture policy, forestry, fishing, outdoor recreation, and environmental programs, would all be examined.

Second, measures of program quality, not just program quantity, should be developed.

Finally, the difficult issues of state governance need more attention. For example, important criteria for evaluating state legislature effectiveness and capacity used in a major 1978 study could be replicated. Likewise, a direct survey of state gubernatorial planning, budgeting, management and evaluation practices would give us much greater information than currently is available.

We are happy to respond to questions about the strengths and limitations of specific measures, the reasons we chose these measures and rejected others. We would also be delighted to receive suggestions for better measures.

Appendix C: Literature Reviews

Though developed for internal consumption, CfED has conducted eighteen literature reviews during the initial research phase of our Economic CLimate Project (of which the *Development Report Card* is a part), several of which have been or will be published in the coming months.

- *The Role of Taxation in State Business Climate.*

  This review covers the following subjects: the role of different business investment decisions in job creation; major factors in the business location decision; the potential effects of various major state and local taxes; the relative size and variation of state and local taxes; evidence from survey studies, interregional and intraregional econometric studies, and simulation studies; and the indirect effect of taxes on population movement.

- *Business Location and State Personal and Corporate Income Taxes: Arguments Pro and Con.*

  This review evaluates the pro and con arguments involving: investment tax credits, R&D credits, targeted industry credits, capital gains, loss carry-forward and -back, the accelerated cost recovery system, and unitary taxation.

- *Unions and Productivity.*

  This review surveys a wide range of articles and reports regarding the effect of unions on productivity, wages, and profits.

- *Infrastructure.*

  This literature review looks at the issues involving infrastructure maintenance and investment and economic development, including the size and nature of infrastructure financing needs, the reasons for a decline in infrastructure spending, the link between growth and a sound infrastructure, and the methods of expanding and improving infrastructure investment.

- *Disinvestment: Explorations and Strategies.*

  This review looks at the issue of plant closings and disinvestment, including the questions of corporate disinvestment/relocation strategies, the effect on ownership structure on plant shutdowns and relocations, the costs of disinvestment, and case studies of corporate closures and contractions.

- *Business Climate and Industrial Location.*

  This survey reviews the most prominent studies of the industrial location decision. It pays particular attention to the question of how location decisions vary by economic sector.

- *The Location of Services: Implications for Development.*

The survey looks at the service sector transformation, the role of services in the local and regional economy, and the reasons for the location of services.

- *The Location of High Tech.*

This review examines the location factors that encourage high technology employment in a region or locality.

- *Foreign Investment.*

The review examines the growth of foreign investment in the U.S., as well as why they invest where they do.

- *Workers' Compensation.*

This survey reviews the history and structure of the workers' compensation system, the effects of its costs on business, and the recent efforts to reform and cut workers compensation costs.

- *Union Density and Economic Growth.*

This original empirical study analyzes the effect of union membership on differential state growth rates.

- *Entrepreneurship.*

This survey reviews the definitions of entrepreneurship, the role of the entrepreneur in development, the effect on entrepreneurship on jobs, innovation and productivity; the reasons for the entrepreneurial event; the effect of different socioeconomic environments on entrepreneurship; and the psychology and sociology of the entrepreneur.

- *Environmental Regulation and Industrial Siting.*

The review surveys whether environmental regulation causes industry relocations and closures, slows macroeconomic growth, or influences new plant siting decisions.

- *Analysis of State Venture Capital Programs.*

This paper looks at how capital markets work and evaluates the information on the effectiveness of new state venture capital funds.

- *Labor-Management Cooperation.*

This literature review analyzes recent articles, reports and books in six major areas: the definition of labor-management cooperation; historical perspectives on labor-management cooperation; current trends in labor-management cooperation; lessons and issues in labor-management cooperations; and public policy, economic development and labor-management cooperation.

- *Business Climate in the Midwest States.*

This review (conducted for the National Center for Policy Alternatives by Mt. Auburn Associates) reviewed press clippings and conducted interviews of public officials in six states (Indiana, Illinois, Wisconsin, Minnesota, Ohio and Michigan) to take a reading of the business climate political issues in a region. The major issues which emerged included: unemployment and workers compensation, utility rates, liability insurance, taxes, welfare, infrastructure, education, hazardous waste, and prevailing wage laws.

- *Capital Markets and Economic Development.*

This survey reviewed the major theoretical and empirical studies of the role of state and national capital markets in economic development.

- *The Role of Human Capital in Development.*

This literature review looks: human capital and economic development, the role of different types of labor force skills, the historic contribution of human capital to growth, and the role of human capital in U.S. economic future.

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MAKING THE GRADE:

The 1988 Development Report Card for the States

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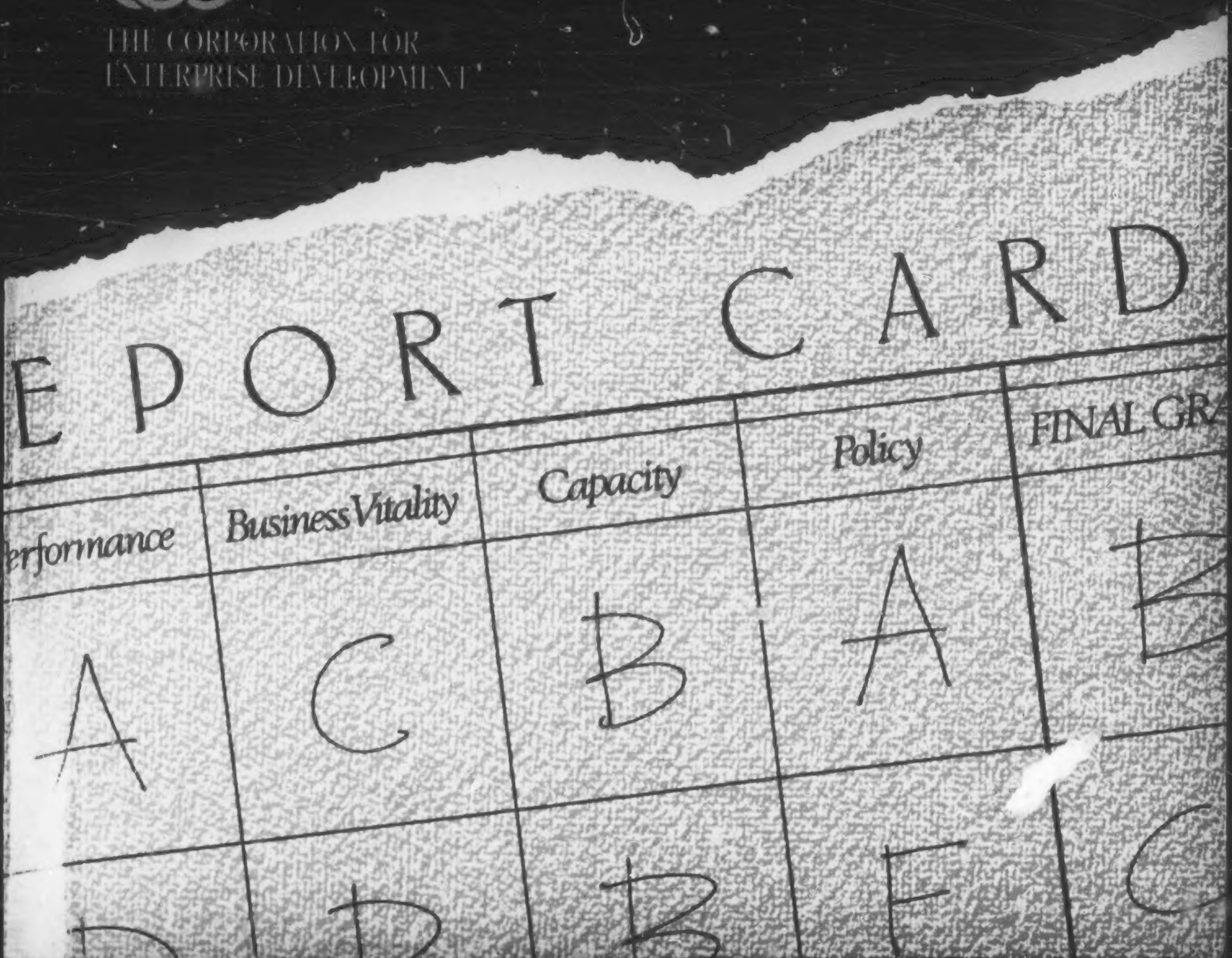
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MAKING THE GRADE:

The 1988 Development Report Card for the States

April 1988

THE CORPORATION FOR ENTERPRISE DEVELOPMENT
with
MT. AUBURN ASSOCIATES

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No project we have undertaken has made me prouder of my colleagues here at The Corporation for Enterprise Development than this one. Mitchell Horowitz bravely took over as project director midway in its preparation, and steered it through to completion with integrity, dedication and patience. Gary Prince developed the Performance Index, collected most of the *Report Card* data and forged new frontiers in computer wizardry. Bill Schweke developed the Policy Index, and Rona Feit added her expertise in designing the Transfer Payment Investment Index. Janet Topolsky managed the transformation of the document from draft to public distribution, ensuring that from the smallest grammatical rule to the largest conceptual assertion, the *Report Card* was of the highest quality possible. Deborah McGlauflin and Roger Coates helped develop support for the project. And our administrative staff — Vella Traynham, Dianna Harrison, Barbara Betts and Debby Manley — guaranteed that it all got done.

My thanks to all of them, and to all who will use *Making the Grade* to help their states make economic progress. In the end, we will take our grade on how much the *Report Card* helps in our mutual quest for a more vital and equitable economy.

Robert Friedman
President
The Corporation for Enterprise Development
April 1988

Prologue

Last year, the Corporation for Enterprise Development (CfED) published the first edition of *Making the Grade: The Development Report Card for the States*.

The response was astonishing.

As the weeks of media attention gave way to months of consultations with state economic development officials, business associations, regional organizations and others, it became clear that something important had happened: we had changed the boundaries of the age-old debate over "business climate."

It was probably inevitable. If we hadn't done it, sooner or later someone else would have. It was inevitable because the economy of big factories and mass production — the economy of Henry Ford and the "Arsenal of Democracy" — had changed and had been joined by a new generation of fast-moving, innovative, highly-adaptable entrepreneurs. And as the economy changed, the conditions important to economic development — and to the businesses that create that development — changed as well. The old economy was driven by quantity; the new economy is driven by quality. The old economy was fueled by brawn; the new economy is fueled by brains. The old economy was concerned with cost; the new economy is concerned with value. It only made sense that we needed a new way to measure which state economies have what it takes for businesses in the new economy to flourish and which, at least at present, do not.

As you might expect, we got a lot of very nice letters from the states that did well on last year's *Report Card*. What you might not have expected — certainly *we* didn't — were the supportive calls and letters we received from officials in states that did poorly. Over and over again they told us how difficult it had been for them to get senior officials and business organizations in their state to recognize that new jobs and businesses would be created by people already in the state, not by people lured from elsewhere; that there was a direct connection between their long-term investments — in education, sewer systems or road maintenance, for example — and their capacity to spawn, attract and support new business development; and that their workers were only as good as the schools that produced them. Because of their state's low grades on the *Report Card*, they were finally being heard.

The more we talked to these folks the clearer it became that a new consensus is developing: that we all live in a complex economy — part private, part public — and that partnerships between these two players are essential if the United States is going to regain the leading position in the global economic race. The competition is just too tough, the change just too rapid for the players not to cooperate in the challenge to create expanding and widely shared economic opportunity and growth.

CfED didn't create this emerging consensus, we simply documented it for the first time.

And now, for the second time. *The 1988 Development Report Card for the States* is, we think, a substantial improvement over our first effort. Some results are surprising, others confirm what we already suspected. All underscore how much we have yet to learn about what makes state economies "tick."

So we offer *The 1988 Development Report Card for the States* as a tool for all those enrolled in the race for the economic future.

The Race for the Economic Future

1988 will be remembered as a year of races. Presidential races. Winter Olympic races. Summer Olympic races. But the most important race of all has already been underway for several years: the fifty American states, along with the developed nations of the world, are in a race for the economic future — a race for leadership and dominance in the global economic marketplace. In the past, the United States was always the odds-on favorite, but that is no longer the case. Today, the competition is stiffer, the field is wide open, and the stakes are higher than they have ever been before.

The Economy Goes Global and the Players Change

America's economy, once the dominant producer of consumer products for an expanding world of eager buyers, today faces unprecedented international competition for virtually every product and service we produce.

At first, we yielded to Third World "copycats" — countries which had copied our mass production systems and undercut us on price by paying their workers pennies per day. Then, slowly at first, but with increasing speed and persistence, our competitors began competing — and winning — on a playing field we thought was ours alone: technological innovation and quality. Today, we find ourselves toe-to-toe with competitors who are producing goods and services more innovative, more technology-intensive, and more highly valued by the world's consumers than our own.[1]

It took us a while to realize what was happening. In the meantime, our big manufacturing industries declined. Factories cut back. Some closed altogether, occasionally shipping themselves overseas. Laid-off workers waited to be called back to jobs that no longer existed. As plants contracted or closed, entire communities suffered.

We were so busy trying to cope with the wrenching human and community effects of these gloomy events that we nearly missed what was really going on: *A new economy was being born.* The American economy — stunned, but still awesomely powerful — was fighting back. Old businesses were restructuring. New businesses were being formed. And *both* were doing things very differently than before.

The Challenge of Adding Value

It turns out that it isn't smallness, or newness, or even whether they are in declining or growing industry sectors that accounts for the success of America's growing businesses. What matters is how they operate and the quality of what they produce.

Given the cost advantage Third World competitors hold, we win not by trying to make more of something cheaper, but by making something better. Under the new rules of global economic competition, businesses win by innovating constantly — by repeatedly creating and improving products and services, inventing more efficient production systems and technologies, and identifying and penetrating new markets — in short, by *adding value*. It is this characteristic of creating incremental increases in value that best defines the businesses that are succeeding in today's economy, not whether they are big or small, old or new.

A quick look at the rapidly-growing firms that are members of the American Business Conference (ABC) tells us a lot about what it takes to lead in this economy. Businesses that are members of ABC consistently post growth in excess of 15 percent per year. From 1981 to 1986, ABC firms increased their foreign sales by 20 percent a year, five times the record of other American firms. Are these "high fliers" all new small businesses? No, a number are large and have been in business for years. Are they all "high tech" companies? Not at all. They include companies from every sector of our economy: manufacturing, service, finance, real estate, high tech and low tech. What they have in common is that they compete on the basis of quality, innovation, service to customers, flexibility to meet changing needs and astute marketing — not cost. They are constantly adding increments of value to their products — a new idea here, a bit of new technology there.[2]

Only by adding value can we remain competitive and offer our citizens chances for increased standards of living. The alternative is to impoverish ourselves so that we can compete on costs — not an alternative many would desire.

Value-Adding Partnerships

Precisely the same characteristic — a commitment to adding value — is what distinguishes the states that are the leaders on the *1988 Development Report Card*. For some years now, the high-scoring states have been making conscious, incremental investments in their ability to support and assist businesses in the challenge of economic development.

The notion that state governments can be partners with business is still quite new. For years, many have argued that the best thing government can do for business is "stay out of the way." But in today's complex, rapidly changing and intensely competitive economy, that's a false option.

In fact, government has always been a key player in the economy. The general direction of the economic race has been and continues to be affected by macroeconomic decisions made largely by the federal government — trade policy, fiscal policy, monetary policy and so forth. Slight adjustments in federal policies can cause significant shifts in the fortunes of industry.

But in today's economy, the specific

standings of the competitors in the economic race — the businesses that are "in the running" — are often influenced by microeconomic decisions made largely by state and local governments. The reason has to do with the special needs of the businesses that are the new leaders in our economy and the role state governments play in serving those needs:

- The new competitors depend upon the ready availability of skilled and adaptable technicians and workers. The adequate supply of these workers depends upon the decisions state and local governments make about investments in primary, secondary and higher education.

- Many of these businesses are too small to be able to afford the kind of remedial education and training programs currently run by big corporations to upgrade the skills of the adult workforce, so state investments in adult education directly affect their competitiveness.

- The start-up and expansion of such businesses depends on how available and accessible the right kinds of capital are at the right times. This depends, in turn, on the willingness of private investors (individual and institutional) to accept prudent risks with the potential for future return. States can influence capital markets, both directly through their own investments, and indirectly by how they regulate financial institutions, to help ensure that these needs will be met.

- The ability of these businesses to attract and retain the talented employees they need is affected directly by the quality of life in the communities where they are located. Creating and preserving quality of life is a fundamental responsibility of state governments.

- These businesses depend upon a steady stream of new technologies and ideas. The environment for innovation in any state is determined, in part, by the extent to which research and development is encouraged and supported.

- Finally, the ability of these businesses to expand and thrive depends, in part, upon the regulatory environment established by state governments and — for would-be or budding entrepreneurs — the degree to which those governments are able to provide management and technical assistance to help them grow.

For the competitors in this new economy, the determinants of the economic climate in a state are very different than they once were. For example, within reasonable limits it's not how high taxes are that's important, but what value you get for them — in schools, highways, quality of life and public safety. Within reasonable limits, it's not how high wages are, but whether the productivity of the workforce is worth the wages it gets paid — whether it has the kind of adaptable skills needed in businesses where the tasks may change every few weeks, or even daily.

In short, both for businesses and state government, adding value is the central challenge of today's economic competition. The states which have committed themselves to adding value — to long-term investments in the skills of their workforce, the condition of physical infrastructure, the accessibility of financial capital, the quality of their research institutions, the viability of communities both rural and urban, and the attractiveness of the environment — have become partners with the businesses competing in the race for the economic future. And together these partners are drawing ahead of the pack as the economic race continues.

Is there any objective proof of a relationship between the competitiveness of businesses and the investments made by the states in which they are located? We turn again to the American Business Conference for one answer:

> *Last year, 75 percent of ABC's member firms were located in states that scored A or B on the 1987 Report Card's Performance Index, 72 percent in states that scored A or B on the Business Vitality Index, 84 percent in states that scored A or B on the Capacity Index (61 percent in A states alone), and 73 percent in states that scored A or B on the Policy Index.*[3]

Expanding Economic Opportunity

Perhaps the greatest challenge facing our nation is to expand economic opportunities for all people and all regions. A commonly heard comment across all states is: "Actually, we are not one, but two states." One part — usually metropolitan — is doing quite well, and the other — most often rural or burdened by plant closings or chronic poverty — not only is not doing well, but is slipping further behind. Indeed, the measures of disparity, between rural and urban, and between inner city poor and mainstream suburban, appear to be growing.[4]

There are abiding social and ethical concerns with these divisions. What we try to highlight in the *Development Report Card*, however, are the economic concerns. Just as equipment or buildings not maintained and upgraded decay or fall obsolete, so do people not educated and communities not invested in fall behind. The resulting unemployment, poverty, crime and illness impose costs on the rest of society. More importantly, the productive capacity of people remains untapped.

Many development practitioners looking for ways to create and expand businesses — and thereby jobs, income and wealth — quickly pass over distressed communities, seeing little potential. But there is far more going on in these distressed communities than easily meets the eye. Evidence abounds of the potential for entrepreneurial renewal in distressed communities. In rural Iowa, in the midst of the collapse of the farm economy, new businesses formed in 1980 and still in existence in 1986 had added 49,499 jobs or 12.71 percent of total employment in rural Iowa.[5] In chronically poor urban communities too, people are starting businesses which hold the seeds of renewal. The poor in the Midwest are twice as likely to try self-employment as their non-poor fellow citizens.[6] (See *Appendix B* for a fuller discussion of the *Report Card* findings for rural states.)

Taking the Measure of State Economies

Trying to record the standings of the competitors in the race to the economic future is no mean feat. Every state economy is different, and every business has different requirements for growth. The big question is: how can we recognize a state with an economic climate capable of supporting business development — that is, a state where all the actors are doing their part to meet the challenge of adding value?

Last year we said that the answers to four questions can present us with a pretty accurate picture of the economic health and attractiveness of state economies. This year, while we have improved or replaced some of the individual measures we use, the organizing questions remain the same:

1. *How well is the state's economy performing?*

The bottom line on how an economy is doing — and a major indicator of whether it offers a good place for businesses to grow — is its current performance, that is, how well it is doing its job of providing citizens opportunities for employment, income and an improving quality of life.

2. *How vital are the businesses in the state?*

The vitality of any state economy is driven by the vitality of the businesses that compose it — how competitive they are, how diversified they are and how many new businesses are being created each year.

3. *What is the state's capacity for continued growth?*

Given the needs of today's and tomorrow's businesses, *their* future is tied directly to the investments a state makes in *its* future — in strengthening the skills of today's and tomorrow's workforce, in building its technological capacity, in improving capital availability and accessibility, in maintaining its physical infrastructure, in enhancing amenities and in investing in distressed communities.

4. *What policies has the state established to support business growth and expand individual opportunity?*

We know now that state policy decisions can and do have important effects on the development process. We also know that the states which led last year's *Report Card* participated in and often initiated partnerships with the business community to foster or alter the course of economic development. Given these new realities, the question, slightly rephrased, is this: is the state an active member of the team, or just a bystander?

Thus, in simplest terms, the objective of *The Development Report Card for the States* is to ask the kind of questions that will illuminate how well states, their citizens, and their partners in private industry are doing in the race for the economic future.

But this is easier said than done. When you ask "the right questions" about state economies for the very first time, as we tried to do last year, there are formidable data problems. If you ask questions no one has asked before, the chances are the answers will not be readily available. No one will have been collecting data about them. We are forced, in these cases, to use "proxies" for the precise information we want. Sometimes, even proxies are unavailable.

In the year since the first edition of the *Report Card* was published, we have worked to strengthen the measures we use and abandon those that either cannot be strengthened or, worse, turn out not to measure what we thought they did. In measuring economies, as in all things, practice makes perfect.

This year, the Performance Index has been refined only slightly, and comparisons in the standings from last year to this can be made with confidence. The Business Vitality Index is almost completely overhauled. It still measures vitality, but it does so with new measures that are much more sensitive than they were last year. Even with this increased sensitivity, the data available to measure the vitality of businesses in the new economy leave a lot to be desired. The Capacity Index is refined this year as well, but not as extensively as Vitality. And finally, many new measures have been added to the Policy Index, and have been gathered into different groups than last year. But the overall approach is similar, and there are few major differences in the Policy results. These changes are discussed in the beginning of each Index chapter.

The central point, however, is this: what we have done is to seek answers to the basic questions people ask about an economy. How is it doing? How competitive are its businesses? Are investments being made for the future? We emphatically do *not* look around for easily collected data or precise mathematical models and then try to describe economies in these largely artificial terms. Our method may be a bit less precise, but it's based on how development really happens. And the results prove it.

Why a Report Card?

We present the results of this analysis as a "report card" for several reasons.

First, because economies are complex and the needs and interests of readers differ, no single "subject" is sufficient to characterize how competitive a state economy is. We have chosen four distinctly different, though related, indexes — or "subjects" — which, taken together, present a more comprehensive review of each state.

Second, numerical rankings obscure similarities among states and tend to take on an importance out of proportion to their real value. Instead, we assign "grades" — from *A* to *F* — to states with relatively similar levels of performance: the top ten states receive *A*'s; the next ten receive *B*'s; the middle fifteen receive *C*'s; the next ten receive *D*'s; and the final five receive *F*'s. As in school, there can be differences in actual scores within these grades but, given the imprecision of the data available, grade ranges are as close as we believe anyone can reasonably come in sorting out the overachievers and underachievers.

Third, as with school report cards, these grades are relative — that is, where an individual state stands depends on the overall performance of all the other members of the "class." A state with a low grade may be making great strides in improving its own performance, but if all the other states are improving as well, the grade may not change dramatically.

Finally, any report card includes an implicit assumption that there is still room for improvement, and that is certainly the case with state economies. There is no fixed goal; in the race for the economic future every competitor has the opportunity to improve his standing — even if he is only improving on his own past record. The grades assigned, particularly the *D*'s and *F*'s, are less a judgment than they are an indication of the opportunity for improvement.

The Big Picture: The Summary Results

The Leaders

The states in the Northeastern "megalopolis" — the heavily urbanized and developed stretch of the East Coast from Washington, D.C. to Boston — continue to set the pace in the nation's race to the economic future, just as they did last year. Employment and income continue to rise, businesses continue to grow, and the states themselves are continuing to invest in future growth, not content to "coast." This year, five of the six states that earned all *A*'s and *B*'s on the *Report Card* are from this booming region: Connecticut, Massachusetts, Maryland, New Jersey and Vermont. Only Minnesota is outside the region.

The Contenders

The next tier of states — those with only one grade below an *A* or *B* — include California, Delaware, Maine, Pennsylvania, Virginia, Washington and Wisconsin. Some of these states in the second tier are among the up-and-coming states in the nation, while others are long-term economic stalwarts working hard to address the challenges of a changing economy.

The Pack

The twenty-five states found in the pack — each earning *C*'s or worse in at least two of the Indexes — come in several different varieties. Most encouraging are a handful of states found mostly in the industrial Midwest and the New South that are generally lagging behind the top states in economic performance, but have established policies and investment commitments to turn their economies around. These states could very well be the "new challengers" in the years to come. They include Arkansas, Florida, Indiana, Michigan, New York, North Carolina, Ohio, Oregon, South Carolina and West Virginia — all of which earn either an *A* or *B* in the Policy Index.

Also in the pack are states which are best described as "coasting." These states tend to have well-performing economies but weak foundations. They lag other states in the policies and investments in capacity-building needed to power their own growth. Most prominent here are New Hampshire and Rhode Island, which largely benefit from their proximity to the robust Boston metropolitan area.

A notch below these coasting states are a number of states which display average or slightly better economic performance but average to weak efforts in development policies. They include Arizona, Colorado, Georgia, Hawaii, Illinois, Missouri and Utah.

Finally, in the pack are a number of states hard hit by recent economic shocks, which are beginning to put policies in place but can do more. They include Alaska, Iowa, Kansas, Montana, New Mexico and Texas.

The Trailing States

Bringing up the rear are states with three grades of either *D* or *F*, or states with at least two grades of *D* or *F* and no grades above a *C*. These include several rural states -- remote from centers of economic activity, many highly dependent upon energy development and other commodity industries and, in the case of the Southern states, still trying to overcome a legacy of poverty. These rural states tend to have little value-added in their economies. Several of the rural energy and commodity-producing states have essentially "colonial" economies: they export raw materials and import finished goods. While commodity prices were high these states thrived. But when the prices collapsed, they were left unprepared for the challenge of rebuilding and diversifying. These include Mississippi, Kentucky, Idaho, Nebraska, South Dakota, North Dakota and Wyoming. Other trailing states include those with energy dependent economies, namely Louisiana and Oklahoma. Joining them with only one grade not in the *D* or *F* range are Alabama, Tennessee and Nevada.

What ties these trailing states together is an absence of either the kinds of investments in future development capacity needed to get them through these difficult times or, for many, the kind of development policies which would help them out of their current predicament. Many of these states held similar rankings last year and appear to have made little progress in the race to the future.

Common Themes

One of the most illuminating results of the *Report Card* is how frequently state scores correlate across Indexes. States in the lead — like Massachusetts, for example — are in the lead on every Index, and frequently in each subindex as well. At the opposite extreme, states that trail the pack tend to do so across the board.

Perhaps the most encouraging overall finding is the aggressiveness with which states facing the most severe challenges of economic restructuring (and in the Southeast, of persistent poverty) are taking control of their own economic destinies. Four of the ten *A*'s in Policy were earned by the Midwestern states of Michigan, Ohio, Indiana and Wisconsin as they respond to the sharp challenges of restructuring in manufacturing. The honor grades earned by South Carolina, North Carolina, Arkansas and Florida are even more encouraging. Their assaults on the joint legacies of poverty and underinvestment promise rapid advances toward parity with the more developed states in the nation.

More sobering, however, is the extent to which economic disparities — between metropolitan areas and rural regions, between vibrant suburbs and distressed urban neighborhoods, between whites and minorities, and men and women — continue to offset the advances achieved by many states. The standings of states like California, New York and Georgia, among others, would be higher were it not for these disparities.

Finally, we note that the rural states that depend on energy and commodity production face a potentially long period of stagnation before lasting improvements in their economies are likely. A quick increase in oil or commodity prices or reduction in the dollar may lift their economic spirits, but an apparent shortage of strategic development policies and a history of underinvestment in the building blocks of economies indicate that they are poorly prepared to face the long-term economic challenges of the future.

Cautions

A caution is in order as we turn to the Indexes themselves: all of these rankings are *relative*. The fact that a state's position has changed since last year may, in fact, be due to changes in the measures we use. But even more likely, changes in state positions may be due as much to the actions of others as to their own actions. In short, it may simply be that Satchel Paige was right: "They may be gaining on you."

The 1988 Development Report Card

	Performance Index	Business Vitality Index	Capacity Index	Policy Index
Alabama	D	B	D	D
Alaska	D	C	C	C
Arizona	C	B	B	D
Arkansas	D	B	F	B
California	C	A	A	B
Colorado	B	C	A	C
Connecticut	A	B	A	B
Delaware	A	A	A	C
Florida	C	B	C	B
Georgia	C	A	C	D
Hawaii	B	C	B	D
Idaho	D	C	D	F
Illinois	C	D	B	C
Indiana	B	C	D	A
Iowa	C	F	C	C
Kansas	C	C	C	C
Kentucky	D	C	F	C
Louisiana	F	D	D	D
Maine	A	A	D	A
Maryland	A	A	A	B
Massachusetts	A	B	A	A
Michigan	C	C	B	A
Minnesota	B	B	A	A
Mississippi	F	F	F	C
Missouri	B	F	C	C
Montana	D	C	C	C
Nebraska	C	F	C	F
Nevada	A	D	D	F
New Hampshire	A	A	C	D
New Jersey	A	A	A	B
New Mexico	F	A	C	C
New York	C	C	B	A
North Carolina	C	C	C	B
North Dakota	C	C	D	F
Ohio	C	D	B	A
Oklahoma	F	D	D	F
Oregon	C	C	B	B
Pennsylvania	B	D	A	A
Rhode Island	A	D	C	C
South Carolina	C	B	D	A
South Dakota	C	D	D	D
Tennessee	D	C	D	D
Texas	D	B	B	C
Utah	B	D	C	C
Vermont	A	A	B	B
Virginia	B	B	B	D
Washington	B	A	A	C
West Virginia	F	C	F	B
Wisconsin	B	F	B	A
Wyoming	C	D	C	D

Endnotes

1. This is not to say that exchange rates, trade, monetary or macroeconomic policy have not and will not play a role in determining global economic competitiveness. They have and they will. If we focus on microeconomic actions and policies in the *Development Report Card*, it is because states have little to say about national and international policies. Without in any way denigrating the importance of such policies, we do believe that microeconomic policies and practices at the state, local and firm levels will play a significant — and often under-appreciated — role in the battle for competitiveness. The endurance of U.S. trade deficits after huge exchange rate differences, the general perception of U.S. goods as inferior in quality, and the unquestioned success of many American firms in the face of disadvantageous national and international policies evidence the significance of microeconomic policies and practices. See, for example, American Business Conference, *The Challenge of Global Competitiveness: Views of America's High Growth Companies* (Washington, D.C.: American Business Conference, 1987).

2. McKinsey & Co,. *Winning in the World Market* (Washington, D.C.: American Business Conference, 1987).

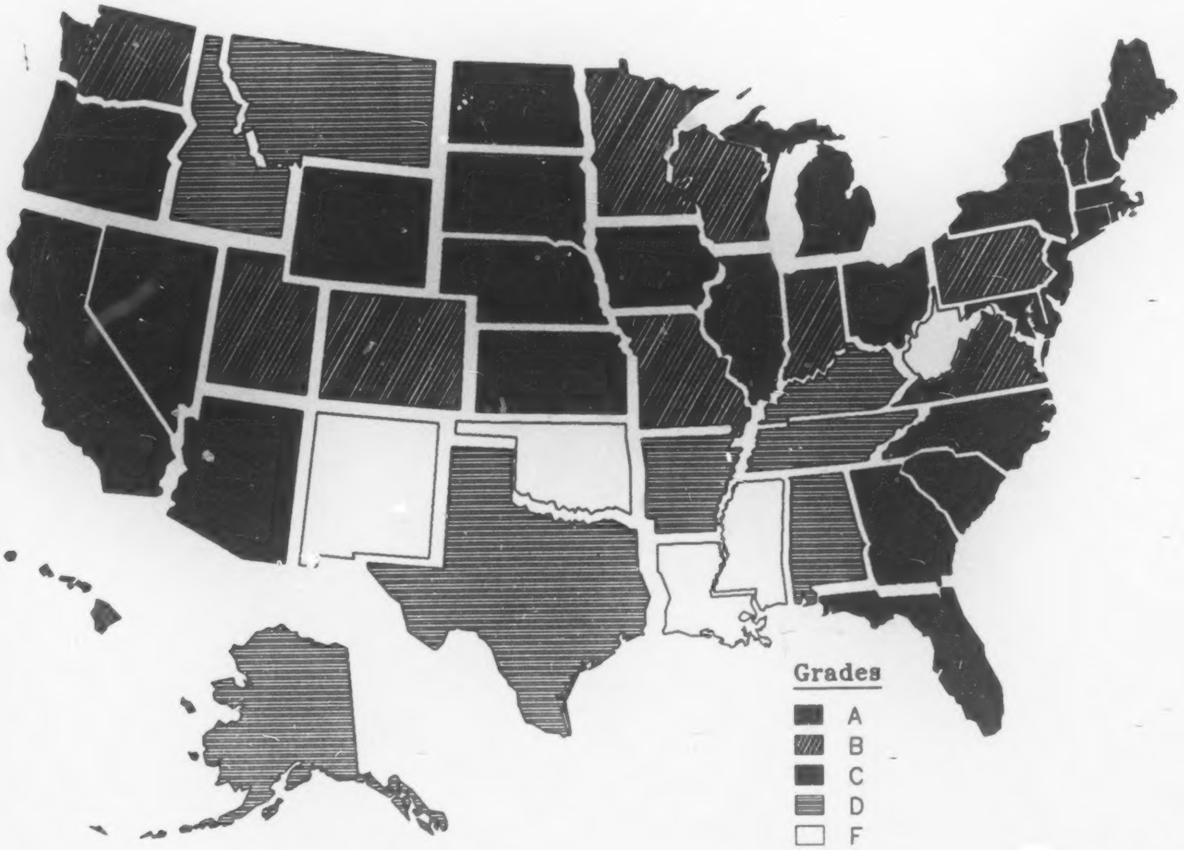
3. American Business Conference, "Making the Grade and the ABC Companies: A Validation," staff paper, American Business Conference, Washington, D.C., August 24, 1987.

4. The share of income in all population deciles except the two highest declined between 1977 and 1984, according to the Congressional Budget Office, *The Changing Distribution of Federal Taxes: 1975-1990* (Washington, D.C.: Congressional Budget Office, 1987). For increases in urban-rural disparities, see U.S. Department of Agriculture, Economic Research Service, Agriculture and Rural Economy Division, *Rural Economic Development in the 1980's: Preparing for the Future* (Washington, D.C.: Government Printing Office, July 1987).

5. Mark Popovich and Terry Buss, *Rural Enterprise Development: An Iowa Case Study* (Washington, D.C.: Council of State Policy and Planning Agencies, 1987).

6. Wisconsin Department of Development, *Expanding Self-Employment Opportunities in the Great Lakes States* (Madison: Wisconsin Department of Development, 1987).

1 The Performance Index


Grades
A
B
C
D
F

Performance Index Report Card

	Employment Subindex		Earnings/ Job Quality Subindex		Equity Subindex		FINAL GRADE	
	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade
Alabama	35	C	34	C	44	D	42	D
Alaska	48	F	32	C	22	C	39	D
Arizona	11	B	25	C	32	C	21	C
Arkansas	28	C	43	D	49	F	44	D
California	16	B	16	B	40	D	26	C
Colorado	33	C	14	B	10	A	15	B
Connecticut	14	B	1	A	13	B	6	A
Delaware	5	A	23	C	11	B	8	A
Florida	8	A	36	D	31	C	27	C
Georgia	9	A	19	B	42	D	22	C
Hawaii	18	B	13	B	19	B	12	B
Idaho	31	C	47	F	35	C	42	D
Illinois	44	D	10	A	41	D	33	C
Indiana	25	C	18	B	3	A	11	B
Iowa	44	D	37	D	16	B	34	C
Kansas	20	B	26	C	25	C	23	C
Kentucky	41	D	43	D	42	D	45	D
Louisiana	50	F	42	D	47	F	49	F
Maine	3	A	16	B	24	C	9	A
Maryland	10	A	5	A	6	A	4	A
Massachusetts	13	B	2	A	4	A	3	A
Michigan	40	D	12	B	28	C	29	C
Minnesota	20	B	6	A	30	C	14	B
Mississippi	42	D	49	F	50	F	50	F
Missouri	25	C	28	C	14	B	20	B
Montana	44	D	50	F	11	B	41	D
Nebraska	29	C	37	D	21	C	32	C
Nevada	5	A	35	C	4	A	10	A
New Hampshire	1	A	4	A	1	A	1	A
New Jersey	15	B	3	A	7	A	5	A
New Mexico	35	C	48	F	45	D	46	F
New York	30	C	7	A	34	C	23	C
North Carolina	11	B	21	C	39	D	23	C
North Dakota	24	C	46	F	29	C	35	C
Ohio	35	C	21	C	27	C	31	C
Oklahoma	47	F	45	D	36	D	46	F
Oregon	32	C	31	C	18	B	30	C
Pennsylvania	35	C	9	A	22	C	19	B
Rhode Island	2	A	8	A	2	A	2	A
South Carolina	25	C	29	C	45	D	35	C
South Dakota	23	C	40	D	15	B	28	C
Tennessee	18	B	37	D	47	F	39	D
Texas	35	C	32	C	33	C	38	D
Utah	17	B	27	C	16	B	16	B
Vermont	7	A	14	B	8	A	7	A
Virginia	3	A	11	B	37	D	13	B
Washington	20	B	24	C	20	B	18	B
West Virginia	49	F	41	D	38	D	46	F
Wisconsin	34	C	19	B	8	A	17	B
Wyoming	43	D	30	C	26	C	35	C

1

PERFORMANCE

As each of the nation's fifty states races along the road toward increased global economic competitiveness, the Performance Index provides us with a kind of statistical glance over the shoulder at where we've just been. It is a progress report which asks: "How are we doing?" and "Are we on the right track?" But, as we noted last year, before you can answer questions like these, it's useful to try to understand why we pursue this thing called economic development in the first place.

People work in order to obtain the elements of what they perceive to be "a better life." For officials who worry about economic development, the challenge is to help assure that opportunities for people to obtain a better life are expanding and can be widely shared. The ideal way to find out whether people have such opportunities would be to *ask* them, but there is no practical way to do that. So instead, we need a few measuring tools to get at the answers.

What kind of measuring tools? Well, since obtaining the elements of a better life inevitably costs money, we need to know whether people have the opportunity to earn money. Are there enough jobs to go around? Do they pay enough so people can meet basic needs and put a little bit aside for the future? Do they provide related benefits, like health coverage? Is the number of jobs available increasing or decreasing? Is income increasing or decreasing? Does everyone have a fair chance of getting these jobs?

But not all the aspects of "a better life" can be measured in dollars. When people say: "This is a good place to live and work," they generally mean that it is attractive and safe — safe from crime, safe from environmental hazards, and so forth. If we want to know how an economy is doing, we need to know something about the quality of people's lives as well.

What the Performance Index does is stop each state economy at a point in time and takes its pulse. It doesn't tell us much about the future. It doesn't tell us who will do well in the race to the future. But it does tell us how we are doing, and that's a start.

This year, the Performance Index has four subindexes:

- *Employment*: the extent to which the economy is providing jobs for those who want them;

- *Earnings and Job Quality*: how people are compensated for the work they do;

- *Equity*: the extent to which the opportunity to work is widely shared; and

- *Environmental Health and Safety*: a rough measure of the environment in which people live when they're not working.

What's Different This Year

Several measures that were in last year's Performance Index are *not* in this year's, and others have been added. In the Employment subindex, for example, we dropped *Status of Displaced Workers* because it was redundant with *Duration of Unemployment* and distorted the employment picture in some states.

In the Earnings and Job Quality subindex (which combines two of last year's subindexes), we changed several indicators in order to provide a sharper picture. For example, we use *Average Annual Pay* this year instead of *Earned Income Per Capita* and *Hourly Manufacturing Earnings* because it better reflects what people actually earn on the job, focuses only on those who work, and is not limited to just one industrial sector. For the same reason, we replaced *Income Change Per Capita* with *Average Annual Pay Growth*. In addition, last year we measured the *Number of Working Poor* as one way of gauging the quality of the jobs in a state's economy. We still think that measure is useful, but the measure was based on 1980 Census data — too old, in a rapidly changing economy, to be of much practical use. We dropped *Job-Related Deaths* as a measure of job quality because it was both inaccurate and misleading.

In the Equity subindex, we dropped *Distribution of Income* because data were not available for this year. In addition, we concluded that *AFDC Benefits as a Percentage of Per Capita Income* had less to do with Performance than with Policy and moved it to that Index.

Finally, in the Environmental Health and Safety subindex, we added a composite *Environmental Quality* measure and dropped *Life Expectancy*, a measure we found varied little from state to state. In addition, given the continuing difficulty of acquiring useful measures of quality of life, we do not figure these measures into the Index totals this year.

Subindex One: Employment

As a practical matter, people gauge how an economy is doing by whether they have a job or not. The availability of jobs is the most basic way to illustrate the extent to which the benefits of economic activity in a state are widely shared. We use three direct measures of employment in this subindex: employment growth, the unemployment rate, and duration of unemployment.

Employment Growth

In any state economy, jobs are continually being created or eliminated. The more energetic and flexible the economy, the more this is true. Measuring job growth does not tell us whether the jobs being created pay as well as those being eliminated, or who is getting the new jobs, or, for that matter, whether employment growth isn't simply a reflection of population growth. But it does tell us how quickly an economy is expanding, a key indicator of performance. This year, we measure the percentage of employment growth between 1985 and 1986.

Unemployment Rate

Even if a state's economy is expanding, some people may be left behind. The most accepted measure of the mismatch between jobs and job-seekers is the unemployment rate — the number of people who are looking for work or waiting to be called back to a job from which they have been laid off. Here too, the measure is imperfect. It doesn't tell us anything, for example, about those who have become so discouraged by their inability to find work that they have dropped out of the labor force entirely. But despite these flaws, this is the best measure available.[1]

Unemployment Duration

We need to know more than simply *how many* people are unemployed; we need to know *how long* they have been in that position. Unemployment can occur for a variety of reasons, not all of them negative. Indeed, a worker's ability to move from one job to another is a measure of the range of opportunity in the state and the flexibility of the worker's skills. Long-term unemployment, on the other hand, may indicate that the economy is failing to produce jobs, that the jobs being created and the skills of the workforce don't match, or that the hiring of some kinds of workers is being restricted in some way. This indicator measures those who have been jobless for more than 27 weeks — the point at which unemployment benefits normally expire. Because only those still looking for work are included in this measure, we do not have a way to identify those who have given up and dropped out.

Subindex Two: Earnings and Job Quality

All jobs are not created equal. One of the most jarring impacts of the rapid restructuring of the American economy during the 1980s has been the decline of well-paid, low-skill jobs and the rise of low-paying, moderate-skilled jobs. Caught in between are people who once could support a family by their labor and now cannot. Many of the new full-time jobs being created in our economy pay wages at or below the poverty level. As a consequence, we need to know not just *how many* jobs are being created, but also *how good* — in terms of wages and benefits — they are. This subindex, therefore, measures: average annual pay, change in average annual pay, and the only job-related fringe benefit for which data are readily available, health coverage.

Average Annual Pay

Average annual pay — that is, the total annual pay of all employees covered by unemployment insurance in a state, divided by the average monthly number of employees — provides a clearer picture of what working people can expect to earn from their jobs than does "earned income per capita" because it is based only upon those who are working in the state, not the total number of people in the state. Moreover, these payroll data include bonuses, tips and gratuities, paid vacation, and employer contributions to deferred compensation plans, among other things — not just wages. With few exceptions, all full-time and part-time employees of covered firms are reported, including production and sales workers, corporation officials, executives, supervisory personnel and clerical workers. Excluded are agricultural workers on small farms, most railroad employees, most non-profit organization employees and all members of the Armed Forces.

Average Annual Pay Growth

This measure converts the point-in-time "snapshot" of average annual pay into trend data, measuring the change from 1985 to 1986. Like employment growth this measure aims to portray how much improvement there is in each state's economy.

Health Coverage

The benefits that American workers have come to expect as part of their compensation for work are not being provided by many of the new jobs being created in today's economy. Of these benefits, employer-sponsored health coverage is perhaps the most important. In 1985, 17.4 percent of the civilian nonagricultural population had no health coverage, up sharply from 15.5 percent only three years earlier [2]. If the objective of economic development is to help individuals achieve a better life, then we need to know something about the *quality* of the jobs that the economy is creating. Understanding the extent to which state economies are meeting the health coverage needs of their citizens is one important clue to that quality, and it varies significantly from state to state.

Subindex Three: Equity

Asking the question, "How is the economy doing?" begs another question: "For whom?" Any evaluation of a state economy must be based not just upon the gross employment and income in the state, but upon the distribution of opportunities to gain employment and income as well. An economy is only as strong as its weakest link. The distribution of opportunity — how widely that opportunity is shared — has significant effects on how vital and attractive a state's economy seems to others, because the effects of inequitable distribution are often only too visible: poverty, crime, blighted neighborhoods, social discord, diminished productivity and wasted human talent.

Thus, the performance of a state economy is determined in no small part by how economic change affects the least advantaged and by the extent to which the best jobs in the state are equitably distributed. As elsewhere, the absence of direct measures means we must approach these questions indirectly. We use three proxy measures: the poverty rate, black income as a percent of white income, and — to begin to understand the geographic distribution of opportunity — non-metropolitan unemployment vs. metropolitan unemployment.

Poverty Rate

The number of individuals in a state who live below the federally-established poverty line presents a concrete measure of both performance in general, and equity in particular. An economy with a high percentage of people below this line — whether they work or not — is not fulfilling its basic purpose of providing people with opportunities for a better life.

Black Income Relative to White Income

Income by race is an indicator of the distribution of opportunity across a state. Although states have made significant progress in expanding opportunity to all citizens, a racial divide still exists between black and white incomes. This measure indicates the extent of that divide.

Non-metropolitan/Metropolitan Unemployment

One of the more striking findings in last year's *Report Card* was that rural states in virtually every region tended to fare less well than their urbanized neighbors. Many state economic development officials have noted that the same phenomenon exists within states — that states often have two economies, one urban and generally thriving, the other rural and generally stagnant or declining. There are obvious exceptions: many central cities at the heart of booming metropolitan areas are economic wastelands, while many rural areas have found ways to diversify and thrive. There are no neat measures of the differences between rural and urban areas. As a start this year, we compare non-metropolitan (non-MSA) area unemployment rates with metropolitan (MSA) area unemployment rates, correcting the data so that MSA's do not cross state boundaries.

Subindex Four: Environmental Health and Safety

As the structure of the American economy has changed, the things that are most important to the people and businesses in that economy have also changed. Increasingly, "quality of life" is a driving factor in the decisions people make to raise a family and build a business in a given locale.[3] But what does it mean? Clearly, when people talk about the quality of life in a state, they are talking about more than just environmental amenities. They include a wide but still unfocused array of social, economic and psychological factors as well, from the state's level of effort to enhance and protect the environment, to educational quality, to cultural opportunities, to public facility maintenance, to whether the area seems safe. Some of these concerns are measured elsewhere in this report (*Human Resources* and *Amenities* in the Capacity Index; *Education* and *Amenities* commitment in the Policy Index). But here, as with other Performance subindexes, we are concerned about *outputs* — in this case: crime, environmental quality and infant mortality.

This year, despite a significant research effort — including Freedom of Information Act requests — we have concluded that the measures available to measure outputs simply do not accurately portray the most important elements of quality of life. Particularly with respect to basic environmental issues — drinking water quality, for example — the available data are either fragmentary or misleading. Consequently, we have chosen to display the results of the measures we were able to compile with some confidence as an Environmental Health and Safety subindex, but *not* to include them in the calculation of state economic performance. The measures thus chosen include:

Crime Rate

At the most rudimentary level, the quality of life of a state or region can be gauged by whether people are safe from harm. The higher the crime rate — whether it affects them personally or not — the less safe they are likely to feel. This crime rate, drawing on FBI data, addresses the most serious crimes: murder, rape, robbery, assault, burglary, larceny and motor vehicle theft.

Environmental Quality

An economy which produces a high degree of environmental pollutants is neither "attractive" to new business nor likely to be capable of providing livable conditions for its people over the long term. To get a handle on the environmental quality of states, this year we developed a composite measure, including:

- *Air Quality:* air pollution emissions.

- *Superfund Dumpsites*: the state's number of Superfund-designated toxic waste sites.

- *Hazardous Waste Generation.*

We use these factors not because they represent the full range of environmental quality concerns, but because they are the only factors for which we have consistent nationwide data.

Infant Mortality

Infant mortality rates are commonly used to measure the health of the population for reasons that go beyond the death of infants. Infant mortality correlates highly with the health and nutrition of the mother, which, in turn, provides us with some insight into the living conditions of the family as well as how accessible prenatal care services are.

Findings

The action, quite simply, is in the Northeast.

All six of the New England states earn *A*'s in the Performance Index, as the ripple effect of the booming Boston metropolitan economy continues to spread outward. Continuing the trend we noted last year, all but one of the states in the Northeast "megalopolis" — the rapidly urbanizing and growing region from Virginia to Maine — receive an *A* or *B*. With complex, diversified economies and strong information and technology industries, these states are "hot," as anyone who has tried to buy a home in this region knows only too well. The lone exception, New York, is close behind with a high *C*, its solid performance in earnings held back by the persistence of poverty conditions and relatively moderate employment gains.

"Split level" economies — booming metropolitan areas bordered by languishing rural or non-metropolitan areas, or burdened by the persistence of poverty amid economic growth — characterize a number of the states this year, including North Carolina, Georgia and Arizona, among others.

As was the case last year, the nation's older industrial states — Michigan, Ohio and Illinois, for example — continue to struggle to overcome the unemployment created by major structural economic change occurring in the last decade, even though, as we will see later, many of them are leading on other indexes.

Finally, the bottom of the overall Performance rankings is dominated by rural Southern and Western states. Many of these states have poorly diversified economies heavily dependent upon energy production (coal, oil and gas), mining and, to a lesser extent, agriculture. Others have a history of chronic poverty and have concentrated on hitching their fortunes to recruitment strategies designed to attract "footloose" branch plants through over-generous tax breaks and other incentives. Many of these companies have since moved overseas to even lower production cost environments, leaving the states which lavished incentives on them unprepared to generate their own sources of economic growth.

Employment Subindex Findings

The Employment subindex provides a remarkably clear snapshot of economic activity in the past year. As they do for the Index overall, the Northeastern states dominate the upper end of the list. But there are several notable exceptions, most of which have the "split level" economies we noted above: Florida, Georgia, Arizona and North Carolina. In each of these states there are booming metropolitan areas - transportation and banking hubs with vibrant business sectors — but the benefits of that growth are not widely shared either geographically or socially.

The bottom of this subindex is a stark

reflection of the collapse of the energy industry. Alaska's free-fall to 48th place continues the trend we saw last year in Louisiana, Oklahoma, West Virginia, Kentucky, Montana and Wyoming.

Earnings and Job Quality Subindex Findings

Despite significant changes in how this subindex is measured, the results are quite similar to last year's. The top of the list is led, once again, by Northeastern states, along with several Midwestern industrial states: Minnesota, Illinois and, just missing the Top 10, Michigan. In addition to the broad-based resurgence of the New England states in this list, the common thread among many of these leaders — New York, New Jersey, Connecticut, Minnesota, Illinois, Pennsylvania and Maryland — is that they have mature, urban-centered economies with a large stock of high quality, high-paying jobs and very strong finance and business services sectors. Many of these same states are less successful in the Employment subindex because, in many cases, this stock is not growing quickly.

The bottom of this subindex is populated by predominantly rural states with either chronic or acute low-wage problems. The chronic low-wage states include the Dakotas, Montana, Idaho, New Mexico and Mississippi. The states with acute conditions — Louisiana, Oklahoma and West Virginia, for example — have moderate average wage levels but are pushed to the bottom by low growth in wages in the last year, a phenomenon explained almost entirely by the collapse of the energy industry. The most extreme example is Alaska, which ranks first in average earnings in the nation, but last in wage growth. Indeed, it is the only state in the nation that posted a net loss in the earnings growth measure.

There are other stories hiding below the surface of this subindex as well. Nevada, for example, which rose to an *A* overall in the Performance Index largely on the strength of its employment growth, rates a *C* in this Earnings subindex — indicating that, while new jobs are being created, they don't pay particularly well and offer few fringe benefits. On the flip side of this story are New Hampshire and Rhode Island, states with average wage levels placing them 27th and 33rd, respectively, nationwide. But they are 2nd and 9th nationwide in growth in average wages. In short, the quality of the jobs in these states may be rapidly improving. To a lesser extent, but perhaps more importantly given how far it has come, Arkansas ranks 45th in average wages, but 21st in wage growth — good news for Arkansas workers. And a similar story is being played out in South Carolina and South Dakota.

Equity Subindex Findings

The Equity subindex measures the equity of economic outcomes, not social policies. It tracks a key component of economic performance: the extent to which economic opportunity, as measured by employment and earnings, is widely shared among segments of the population.

The results of this subindex tell us some interesting things about the relationship between economic growth and economic opportunity. First, the upper end of the Equity subindex is dominated by two kinds of states: those Northeastern states that are producing wholesale quantities of high-quality jobs, such as Maryland, New Jersey and Massachusetts; and another group of states in which the population tends to be homogeneous, such as Nevada, Vermont, Wisconsin and Montana.

In the mid-range of this subindex are

the major industrial states that we associate with having "liberal" social policies. Their relatively poor showing underscores the fact that such policies, in the absence of significant employment and earnings opportunities, can do little to break people out of poverty. But these states appear to have grasped this point; they are among the nation's leaders in the Policy Index measures designed to expand employment opportunities for the disadvantaged.

At the bottom of the Equity subindex is the South — both the "Old South" *and* the so-called "New South" — along with the Southwestern state of New Mexico. The common characteristic of all of these states is wide disparities between urban and rural, black and white, expanding economic opportunity and tolerating chronic poverty. But because, as we noted at the beginning of this chapter, this Index is "a glance over the shoulder to where we've been," the rankings of the several Southern states tell a bleaker story than they might if we could look ahead. The reason is that, in several of these states, initiatives are underway to begin strengthening the workforce of tomorrow through education reforms and creative use of transfer payments. Some years from now, we may see improvement. How much of this effort will be reflected in improved standings, however, will depend not only on the level of effort these states are currently making, but the effort their competitors are making as well. The rankings are relative. These states must improve faster than other states are improving to raise their position in this, or any other, subindex.

A measure of regional disparities in a state was added for this year's *Report Card*. This measure examines the disparities in unemployment rates between rural, non-metropolitan areas and metropolitan areas in a state. Not surprisingly, in all but four states, rural unemployment exceeded metropolitan unemployment. Even in highly rural states, these disparities in unemployment rate are significant — for instance, in Maine rural unemployment stood over 71 percent higher than in metropolitan areas in the state; in Idaho it was over 60 percent higher.

Performance Data

	EMPLOYMENT						EARNINGS AND JOB QUALITY					
	Employment Growth		Unemployment Rate		Unemployment Duration		Average Annual Pay		Average Annual Pay Growth		Health Coverage	
	%	Rank	%	Rank	%	Rank	$	Rank	%	Rank	%	Rank
Alabama	**2.40**	**21**	**9.8**	**46**	**15.9**	**37**	**17,638**	**36**	**3.61**	**24**	**64.3**	**32**
Alaska	-3.70	47	10.8	47	14.2	32	28,442	1	-0.88	50	62.4	39
Arizona	**4.91**	**2**	**6.9**	**28**	**8.9**	**9**	**18,870**	**21**	**4.62**	**13**	**62.0**	**41**
Arkansas	2.11	26	8.7	39	11.0	16	16,162	45	3.92	21	56.6	50
California	**2.66**	**18**	**6.7**	**25**	**11.0**	**16**	**21,995**	**6**	**5.00**	**10**	**61.5**	**43**
Colorado	-1.20	44	7.4	31	11.5	18	20,275	9	3.60	25	68.1	23
Connecticut	**2.52**	**20**	**3.8**	**2**	**13.6**	**29**	**22,516**	**4**	**6.08**	**3**	**77.5**	**2**
Delaware	3.27	11	4.3	5	8.3	7	19,639	14	2.57	37	69.2	17
Florida	**4.07**	**7**	**5.7**	**17**	**7.7**	**3**	**17,679**	**34**	**4.23**	**16**	**57.6**	**48**
Georgia	4.09	5	5.9	18	10.2	13	18,746	22	4.63	12	65.2	30
Hawaii	**2.70**	**17**	**4.8**	**9**	**17.0**	**41**	**18,101**	**30**	**4.41**	**14**	**70.7**	**12**
Idaho	-0.45	41	8.7	39	8.1	6	16,602	41	1.49	44	64.2	34
Illinois	**0.45**	**38**	**8.1**	**33**	**18.8**	**45**	**21,452**	**7**	**4.14**	**17**	**67.5**	**26**
Indiana	2.73	16	6.7	25	16.0	39	19,024	17	2.83	35	71.1	9
Iowa	**0.26**	**39**	**7.0**	**29**	**22.1**	**48**	**16,598**	**43**	**3.11**	**33**	**68.1**	**23**
Kansas	1.53	32	5.4	16	12.3	25	17,934	31	3.46	28	69.2	17
Kentucky	**2.14**	**24**	**9.3**	**45**	**18.1**	**43**	**17,357**	**37**	**2.46**	**38**	**62.0**	**41**
Louisiana	-4.20	49	13.1	50	18.6	44	18,290	28	0.41	48	62.7	38
Maine	**4.08**	**6**	**5.3**	**13**	**7.7**	**3**	**16,326**	**44**	**5.82**	**6**	**71.1**	**9**
Maryland	3.33	10	4.5	6	11.7	21	20,121	10	5.74	7	69.8	15
Massachusetts	**1.87**	**28**	**3.8**	**2**	**9.9**	**10**	**20,925**	**8**	**6.61**	**1**	**72.4**	**5**
Michigan	2.18	23	8.8	41	19.2	47	22,720	3	3.82	23	67.0	28
Minnesota	**1.41**	**33**	**5.3**	**13**	**12.6**	**27**	**19,630**	**15**	**4.32**	**15**	**71.3**	**8**
Mississippi	1.20	36	11.7	48	13.9	30	15,420	49	3.14	31	57.6	48
Missouri	**1.77**	**29**	**6.1**	**21**	**13.9**	**30**	**18,913**	**20**	**3.15**	**30**	**65.5**	**29**
Montana	-1.10	43	8.1	33	16.3	40	16,085	47	0.96	46	62.1	40
Nebraska	**0.52**	**37**	**5.0**	**10**	**15.8**	**35**	**16,106**	**46**	**3.14**	**31**	**68.3**	**22**
Nevada	4.97	1	6.0	19	7.7	3	18,739	23	3.08	34	63.3	37
New Hampshire	**4.87**	**3**	**2.8**	**1**	**4.9**	**2**	**18,303**	**27**	**6.38**	**2**	**78.3**	**1**
New Jersey	2.13	25	5.0	10	11.5	18	22,309	5	5.85	5	72.3	6
New Mexico	**1.38**	**34**	**9.2**	**44**	**12.5**	**26**	**17,301**	**38**	**1.84**	**41**	**57.8**	**47**
New York	2.00	27	6.3	23	15.7	34	23,200	2	5.93	4	64.2	34
North Carolina	**3.04**	**14**	**5.3**	**13**	**10.1**	**12**	**17,001**	**39**	**4.78**	**11**	**69.2**	**17**
North Dakota	-1.00	42	6.3	23	10.5	14	15,778	48	1.22	45	67.7	25
Ohio	**2.34**	**22**	**8.1**	**33**	**24.0**	**49**	**19,902**	**12**	**2.41**	**39**	**69.7**	**16**
Oklahoma	-2.20	46	8.2	36	15.8	35	18,345	25	0.82	47	59.0	45
Oregon	**2.57**	**19**	**8.5**	**38**	**14.5**	**33**	**18,322**	**26**	**2.72**	**36**	**67.1**	**27**
Pennsylvania	1.36	35	6.8	27	17.1	42	19,404	16	4.04	19	70.4	14
Rhode Island	**3.01**	**15**	**4.0**	**4**	**3.2**	**1**	**17,733**	**33**	**5.15**	**9**	**73.0**	**4**
South Carolina	3.26	12	6.2	22	18.9	46	16,600	42	4.09	18	68.8	21
South Dakota	**-15.00**	**50**	**4.7**	**7**	**11.7**	**21**	**14,477**	**50**	**3.50**	**27**	**64.3**	**32**
Tennessee	3.26	12	8.0	32	12.1	23	17,661	35	3.97	20	60.9	44
Texas	**-1.20**	**44**	**8.9**	**42**	**11.5**	**18**	**19,934**	**11**	**1.62**	**43**	**63.9**	**36**
Utah	1.60	30	6.0	19	10.7	15	17,863	32	1.63	42	74.2	3
[illegible]	**4.01**	**8**	**4.7**	**7**	**9.9**	**10**	**16,857**	**40**	**5.21**	**8**	**71.1**	**9**
Vi[illegible]a	4.17	4	5.0	10	8.4	8	18,972	18	3.88	22	70.7	12
[illegible]	**3.50**	**9**	**8.2**	**36**	**13.5**	**28**	**19,645**	**13**	**3.59**	**26**	**65.2**	**30**
West Virginia	-0.07	40	11.8	49	31.9	50	18,405	24	2.22	40	58.3	46
Wisconsin	**1.60**	**30**	**7.0**	**29**	**15.9**	**37**	**18,202**	**29**	**3.46**	**28**	**72.2**	**7**
Wyoming	-3.80	48	9.0	43	12.2	24	18,969	19	0.10	49	69.0	20

Please refer to *Performance Index Data Sources* and the *Performance Index* text for further detail on individual measures.

EQUITY						ENVIRONMENTAL HEALTH & SAFETY*									
Poverty Rate		Black/White Income		Nonmetro to Metro Unemp.		Crime Rate per 100 pop.		Environmental Quality						Infant Mort. per 100,000	
								Air Quality		Super. Dumps per million		Hazardous Waste			
%	Rank	%	Rank	%	Rank	Rate	Rank	%	Rank	Sites	Rank	Score	Rank	Deaths	Rank
20.6	**47**	**53**	**48**	**127.6**	**19**	**4.3**	**17**	**2.340**	**50**	**2**	**20**	**1.61**	**43**	**12.6**	**46**
8.8	5	68	19	156.5	42	6.2	40	0.473	23	0	1	0.09	1	10.8	30
10.7	**12**	**68**	**19**	**225.7**	**50**	**7.3**	**48**	**0.620**	**36**	**3**	**24**	**0.30**	**7**	**9.7**	**17**
22.9	49	55	46	144.1	32	3.9	9	0.041	11	4	34	1.60	42	11.6	40
13.6	**25**	**65**	**26**	**163.7**	**45**	**6.8**	**44**	**1.362**	**47**	**2**	**18**	**0.60**	**20**	**9.5**	**13**
10.3	10	71	11	142.8	30	7.0	46	1.330	46	5	37	0.46	14	9.4	12
7.6	**2**	**60**	**42**	**111.0**	**10**	**4.8**	**26**	**0.802**	**42**	**3**	**21**	**1.25**	**34**	**10.0**	**21**
11.4	15	62	35	92.9	2	4.8	26	0.000	1	28	50	1.39	39	14.8	50
13.4	**24**	**61**	**40**	**122.5**	**16**	**8.2**	**50**	**0.484**	**25**	**3**	**29**	**0.24**	**4**	**11.3**	**36**
17.7	41	56	45	139.9	27	5.5	32	0.466	22	0	1	0.53	17	12.7	47
10.7	**12**	**69**	**15**	**145.6**	**35**	**5.7**	**36**	**0.000**	**1**	**0**	**1**	**0.16**	**2**	**8.8**	**5**
16.0	37	73	8	161.7	44	4.2	15	0.217	16	4	33	1.29	35	10.4	25
15.6	**33**	**60**	**42**	**145.5**	**33**	**5.5**	**32**	**0.596**	**35**	**2**	**19**	**1.33**	**37**	**11.7**	**41**
12.0	19	76	7	117.3	13	3.9	9	0.242	17	5	38	1.75	46	10.9	32
18.0	**42**	**71**	**11**	**104.1**	**5**	**4.2**	**15**	**0.000**	**1**	**5**	**36**	**0.65**	**21**	**9.5**	**13**
13.8	27	65	26	126.1	17	4.8	26	0.423	21	3	27	1.00	29	9.3	10
19.4	**46**	**64**	**28**	**152.6**	**39**	**3.1**	**4**	**0.506**	**28**	**3**	**22**	**1.23**	**33**	**11.2**	**35**
18.1	43	49	50	143.0	31	6.1	39	0.171	15	2	13	3.05	50	11.9	43
11.9	**17**	**88**	**3**	**171.6**	**47**	**3.5**	**8**	**0.258**	**18**	**6**	**39**	**0.26**	**5**	**9.1**	**7**
8.7	4	70	14	140.7	28	5.6	35	0.780	40	2	15	0.67	23	11.9	43
9.3	**8**	**64**	**28**	**110.8**	**9**	**4.7**	**24**	**1.930**	**49**	**4**	**30**	**0.73**	**25**	**9.1**	**7**
14.5	30	69	15	140.8	29	6.5	42	0.500	27	8	44	1.29	35	11.4	37
12.6	**22**	**69**	**15**	**154.8**	**40**	**4.4**	**19**	**0.040**	**10**	**9**	**46**	**0.46**	**14**	**8.8**	**5**
25.1	50	50	49	149.5	37	3.3	6	0.000	1	0	1	1.06	30	13.7	48
13.7	**26**	**72**	**9**	**129.2**	**20**	**4.7**	**24**	**0.625**	**37**	**4**	**31**	**1.13**	**32**	**10.2**	**22**
16.1	38	80	6	106.0	8	4.5	22	0.000	1	11	47	0.77	27	10.3	23
14.8	**31**	**68**	**19**	**120.4**	**15**	**3.9**	**9**	**0.147**	**14**	**0**	**1**	**0.27**	**6**	**9.6**	**15**
14.4	29	72	9	105.7	7	6.3	41	0.573	33	0	1	0.37	10	8.5	2
6.0	**1**	**96**	**2**	**99.9**	**3**	**3.3**	**6**	**0.492**	**26**	**13**	**48**	**0.41**	**12**	**9.3**	**10**
8.3	3	61	40	100.0	4	5.2	31	0.541	29	13	49	1.74	44	10.6	26
18.5	**45**	**67**	**25**	**197.6**	**49**	**6.6**	**43**	**0.377**	**20**	**3**	**23**	**0.38**	**11**	**10.6**	**26**
15.8	34	62	35	119.7	14	5.8	37	0.960	44	4	32	0.52	16	10.8	30
14.2	**28**	**63**	**31**	**146.3**	**36**	**4.3**	**17**	**0.332**	**19**	**2**	**12**	**0.53**	**17**	**11.8**	**42**
15.9	35	88	3	152.6	38	2.6	2	0.000	1	0	1	0.35	9	8.5	2
12.8	**23**	**64**	**28**	**131.9**	**22**	**4.4**	**19**	**0.476**	**24**	**3**	**25**	**1.74**	**44**	**10.3**	**23**
16.1	38	63	31	130.4	21	6.0	38	0.549	31	2	14	0.72	24	10.9	32
11.9	**17**	**68**	**19**	**133.8**	**23**	**7.1**	**47**	**0.544**	**30**	**2**	**17**	**0.33**	**8**	**9.9**	**19**
10.5	11	63	31	134.0	24	3.1	4	0.646	38	7	42	1.47	40	11.0	34
9.0	**6**	**63**	**31**	**83.6**	**1**	**4.9**	**29**	**1.302**	**45**	**8**	**45**	**1.56**	**41**	**8.2**	**1**
15.2	32	59	44	161.4	43	5.1	30	0.081	12	4	35	1.07	31	14.2	49
17.3	**40**	**87**	**5**	**113.0**	**11**	**2.7**	**3**	**0.000**	**1**	**0**	**1**	**0.21**	**3**	**9.9**	**19**
18.1	43	62	35	170.4	46	4.5	22	0.794	41	2	16	2.70	48	11.4	37
15.6	**33**	**62**	**35**	**113.3**	**12**	**7.4**	**49**	**0.825**	**43**	**2**	**11**	**2.03**	**47**	**9.8**	**18**
11.1	14	68	19	138.7	25	5.5	32	1.450	48	6	40	0.58	19	9.6	15
9.2	**7**	**101**	**1**	**155.3**	**41**	**4.0**	**13**	**0.000**	**1**	**0**	**1**	**0.41**	**12**	**8.5**	**2**
10.0	9	62	35	189.3	48	3.9	9	0.551	32	3	28	0.75	26	11.5	39
12.0	**19**	**71**	**11**	**145.5**	**34**	**5.9**	**45**	**0.680**	**39**	**6**	**41**	**1.35**	**38**	**10.7**	**28**
22.3	48	68	19	139.7	26	2.3	1	0.110	13	3	26	2.95	49	10.7	28
11.6	**16**	**69**	**15**	**126.1**	**18**	**4.1**	**14**	**0.593**	**34**	**7**	**43**	**0.65**	**21**	**9.1**	**7**
12.0	19	55	46	105.4	6	4.4	19	0.000	1	0	1	0.97	28	12.2	45

*Informational subindex only. This data was not used to calculate the *Performance Index* grades.

Performance Data Sources

Subindex One: Employment

Employment Growth

Employment of workers on non-agricultural payrolls, 1985-1986. Percent change.
Source: Bureau of Labor Statistics, *Employment and Earnings,* May 1986 and May 1987.

Unemployment Rate

Percent unemployed, 1986.
Source: Bureau of Labor Statistics, *Employment and Earnings*, May 1987.

Unemployment Duration

Percent of unemployed that are unemployed more than 27 weeks. 1986 annual rates.
Source: U.S. Department of Commerce, *Geographic Profile of Employment and Unemployment,*
Bulletin 2266, September 1987.

Subindex Two: Earnings and Job Quality

Average Annual Pay

Average annual pay by location of establishment, 1986. Dollars.
Source: Bureau of Labor Statistics, September 1, 1987 release.

Average Annual Pay Growth

Change in average annual pay, 1985-1986.
Source: Bureau of Labor Statistics, September 1986 and September 1987 releases.

Health Coverage

Percent of non-elderly population covered by primary health plan, 1985.
Source: Employee Benefit Research Institute, *Uninsured in the United States*, March 1987.

Subindex Three: Equity

Poverty Rate

Percent of persons living in units with cash incomes below the poverty line, 1985.
Source: Christine Roth and Sheldon Danziger, *Poverty Rates by State, 1978-1985: Estimates from Annual Current Population Surveys* (Madison: University of Wisconsin, Institute for Research on Poverty, February 1987).

Black Income Relative to White Income

Median income (current dollars) of black households as a percent of white households.
Source: 1980 U.S. Census, Table 61: "Selected Social and Economic Characteristics by Race," in individual state volumes: *General Social and Economic Characteristics.* Calculations by The Corporation for Enterprise Development.

Non-metropolitan/Metropolitan Unemployment

Ratio of non-metropolitan unemployment rate to metropolitan unemployment rate, 1986. *Source:* Bureau of Labor Statistics, Division of Local Area Statistics, unreleased data, 1986. Calculations by The Corporation for Enterprise Development.

Subindex Four: Environmental Health and Safety

Crime Rate

FBI Index of Serious Crime Rate per 100 residents, 1986. *Source:* Department of Justice, *Crime in the United States, 1986* (Washington, D.C.: Government Printing Office, 1987); reported in *State Policy Reports*, August 24, 1987.

Environmental Quality

- *Air Quality*
  Percent of state residents living in areas that exceed national ambient air quality standards for ozone and/or carbon monoxide, 1985-86. *Source:* Environmental Protection Agency, "State Implementation of Post-1987 Ozone and Carbon Monoxide Plan Revisions for Areas not Attaining the National Ambient Air Quality Standards," *Federal Register*, November 24, 1987. Calculations by The Corporation for Enterprise Development.

- *Superfund Dumpsites*
  Number of Superfund dumpsites per million population, 1986. *Source:* Environmental Protection Agency, "National Priorities List, Proposed Update #6," January 1987.

- *Hazardous Waste Generation*
  Metric tons of hazardous waste generated, billions per capita, 1986. *Source:* National Council on Public Works Improvement, "Hazardous Waste Management," prepared by Apogee Research, May 1987.

Infant Mortality

Infant deaths per 100,000 live births, 1985. *Source:* Children's Defense Fund, *The Health of America's Children: Maternal and Child Health Data Book* (Washington, D.C.: Children's Defense Fund, 1988).

All per capita population calculations were made by The Corporation for Enterprise Development. Source: 1986 population, Bureau of the Census, Press Release December 31, 1986.

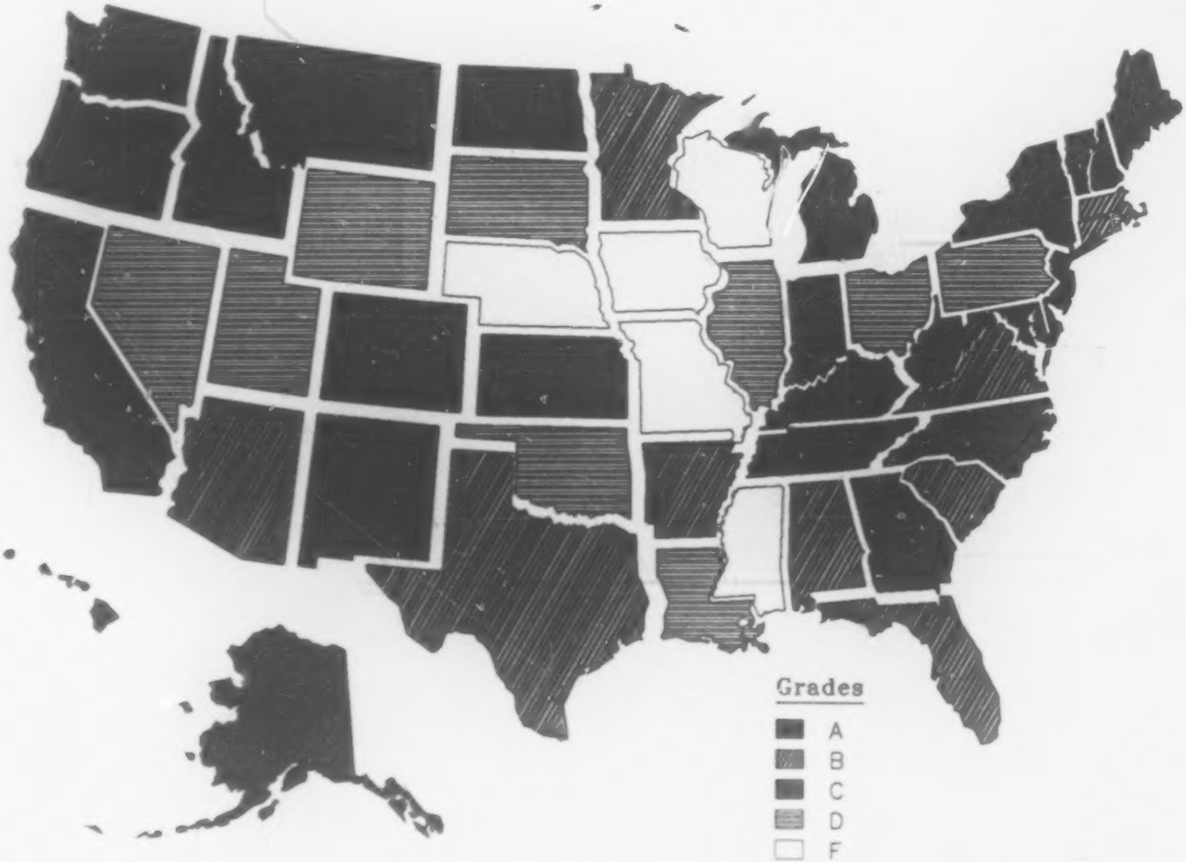
Endnotes

1. See Terry F. Buss, "Unemployment Rates and Their Implications for Human Resource Planning," *Journal of Economic and Social Measurement* 14 (1986).

2. Deborah Chollet, *Uninsured in the United States: The Non-elderly Population Without Health Insurance* (Washington, D.C.: Employee Benefits Research Institute, March 1987).

3. See, for example, Roger Schmenner, "Location Decisions of Large Firms: Implications for Public Policy," *Commentary*, January 1981; and Patricia L. Braden and Susan R. Rideout, "Location Decision-Making in Export-Oriented Business and Industry," unpublished paper, University of Michigan, 1978.

2 The Business Vitality Index


Grades
A
B
C
D
F

Business Vitality Report Card

	Business Competitiveness Subindex		Entrepreneurial Energy Subindex		Structural Diversity Subindex		FINAL* GRADE	
	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade
Alabama	7	A	33	C	19	B	13	B
Alaska	32	C	6	A	48	F	21	C
Arizona	26	C	2	A	49	F	12	B
Arkansas	21	C	27	C	6	A	19	B
California	26	C	7	A	24	C	10	A
Colorado	42	D	8	A	42	D	[illegible]	C
Connecticut	12	B	36	D	5	A	18	B
Delaware	1	A	19	B	18	B	4	A
Florida	39	D	3	A	26	C	20	B
Georgia	9	A	8	A	38	D	6	A
Hawaii	42	D	18	B	33	C	35	C
Idaho	35	C	20	B	13	B	26	C
Illinois	20	B	50	F	41	D	44	D
Indiana	12	B	30	C	39	D	23	C
Iowa	31	C	48	F	40	D	47	F
Kansas	46	F	23	C	1	A	33	C
Kentucky	30	C	27	C	23	C	30	C
Louisiana	40	D	25	C	46	F	42	D
Maine	4	A	16	B	3	A	3	A
Maryland	12	B	11	B	10	A	5	A
Massachusetts	6	A	36	D	15	B	14	B
Michigan	2	A	43	D	44	D	27	C
Minnesota	12	B	32	C	16	B	17	B
Mississippi	45	D	44	D	27	C	50	F
Missouri	44	D	40	D	28	C	48	F
Montana	38	D	13	B	11	B	22	C
Nebraska	37	D	44	D	21	C	46	F
Nevada	41	D	21	C	37	D	38	D
New Hampshire	5	A	1	A	35	C	2	A
New Jersey	11	B	24	C	7	A	7	A
New Mexico	29	C	8	A	2	A	8	A
New York	16	B	47	F	8	A	31	C
North Carolina	19	B	38	D	9	A	28	C
North Dakota	25	C	34	C	30	C	32	C
Ohio	18	B	46	F	43	D	41	D
Oklahoma	48	F	25	C	31	C	43	D
Oregon	46	F	16	B	25	C	34	C
Pennsylvania	17	B	41	D	47	F	37	D
Rhode Island	24	C	42	D	20	B	36	D
South Carolina	7	A	38	D	12	B	16	B
South Dakota	48	F	34	C	14	B	45	D
Tennessee	28	C	21	C	29	C	25	C
Texas	32	C	5	A	34	C	15	B
Utah	50	F	15	B	32	C	39	D
Vermont	3	A	4	A	4	A	1	A
Virginia	22	C	12	B	22	C	11	B
Washington	22	C	13	B	17	B	9	A
West Virginia	9	A	31	C	50	F	24	C
Wisconsin	34	C	49	F	36	D	49	F
Wyoming	35	C	27	C	45	D	40	D

*To determine this Index's final grade, the *Competitiveness* and *Entrepreneurial Energy* subindexes were each assigned a weight of three-sevenths, and *Structural Diversity* one-seventh. Please see *Appendix A* and the *Business Vitality Index* text for further explanation.

2

VITALITY

The standings of each state competitor in the economic race for the future depend, to a significant degree, on the vitality of the businesses in that state. Businesses create jobs. Businesses create income. And often, businesses spawn and attract other businesses. Their ability to create, produce and sell products and services that are valued in national and international markets — value that can be turned into jobs, wages and profits — determines much about the economic future of the states in which they are located.[1]

How can we tell if state economies have businesses that meet the test of vitality? As we begin to understand more clearly the dynamics of state economies, there is mounting evidence that vital businesses, and vital state economies, conform to four basic principles:

- *Long-term economic vitality depends on the ability of businesses to initiate, adapt to, and take advantage of rapid change.*

In an economy in which the majority of products and services are now traded globally, accelerating change is the only constant. Any business which takes its current success for granted, blames others for its decline, or simply digs in to "wait for the next cycle" to lift it up again, is on the road to failure. Any economy composed largely of such businesses is travelling the same downhill route, as states that once depended primarily on steel, oil or timber production know only too well.

Vigorous, vital businesses expect change, respond quickly to it, even initiate it. They create new products. They offer new services. They develop new, more efficient production processes. They seek and open new markets. In short, they innovate — constantly. These innovations seldom are of "breakthrough" proportions. More often they take the form of slight elaborations, new variations, small improvements — just enough to keep ahead of the competition.[2] And while new and small businesses tend to innovate more frequently and more aggressively than large, established companies, some large companies manage to build innovation into their "corporate culture" despite their size or age.[3]

- *The principal source of economic vitality in any state is local businesses and entrepreneurs, not businesses attracted from some other state or nation.*

More than 80 percent of the *net* employment growth in any state comes from new business start-ups and on-site expansions of existing businesses.[4] Moreover, entrepreneurs choose overwhelmingly to start businesses where they already live, rather than shop across state lines. What's more, new businesses, offering new products, are often the starting point for new industries. As they grow, they attract or precipitate the establishment of suppliers, spawn spinoff businesses, even attract competitors, often creating quite quickly a significant geographic concentration of related businesses.

What this means is that states already have within their borders the seeds of their own economic future. All they need to do is nourish them. Instead, however, many states conduct elaborate and expensive self-promotion and recruitment programs to attract out-of-state companies and branch plants. Only sporadically are these efforts successful, and this success is often short-lived. The footloose plants these states work so hard to attract are far more likely to move elsewhere — *40 times* more likely, according to one recent study[5] — than the plants of in-state businesses. Moreover, these footloose plants tend not to support the local economy, whereas locally-owned businesses tend to purchase from local suppliers and invest their profits locally.

All this is not to say that recruitment strategies do not have their place. The problem is that state economic development efforts too often focus on the tail and miss the dog. Attraction strategies need to complement indigenous development strategies — not substitute for them.

The final irony is that a strong indigenous business development strategy is often the most powerful business attraction strategy a state could mount. Many of the same factors important to the expansion of existing businesses — labor quality, proximity to markets, quality of life, quality of educational system — are at the top of the lists of those who make branch plant location decisions.[6]

- *Industrial diversity is crucial to long-term economic vitality.*

Diversification — in all traded sectors — is crucial to economic vitality because it reduces vulnerability to cyclical or unexpected downturns in dominant industries. Almost without exception, the states that did poorly on last year's *Report Card* were states whose fortunes were driven — up and, ultimately, down — by one or two dominant industries (oil in Louisiana and Texas, mining in New Mexico and West Virginia, agriculture in the Plains, and so forth). Such reliance can be a recipe for hardship, not just because of the dislocations caused when the crunch comes, but also because such states seldom have policies in place to deal with those dislocations.

Such dominant industries are typically central features of the state's traded sector — the sector that brings new wealth into the state. Service sector industry jobs are often seen as poor substitutes. But our economy has changed so dramatically in recent years that the old assumption — that service businesses export little and thus bring in no new wealth — is no longer accurate. Many growing service industries, including research and development, business services, transportation, finance and insurance, among others, *are* part of the traded sector and offer significant opportunities for business and wage growth.[7]

In the final analysis, states cannot afford to overlook any sector in the quest for economic diversity.

- *The vitality of businesses in a state largely depends upon the extent to which they invest in themselves — in the products and services they produce, in their employees, and in their physical plant.*

Competitiveness depends upon innovation, and innovation is both incremental and unpredictable. Ideas for new products and services come not from "businesses" but from *people*. Investments in the skills and capabilities of employees can be among the most important and direct routes to competitiveness open to businesses.[8] In the same vein, constant investment in upgrading physical plant and equipment can lead to advances in production efficiencies which themselves can provide, however briefly, a competitive edge.[9]

Using these four principles as a base, this Index gauges the vitality of businesses within each state by using three subindexes. The first looks at the competitiveness of existing businesses — how well they are doing and the extent to which they are investing in themselves. The second examines the level of entrepreneurial energy in the state. The third measures the structural diversity of the state's economy.

What's Different This Year

Experience with the Business Vitality Index led to major changes this year. In the Competitiveness of Existing Businesses subindex, we expanded *International Exports*, which had been based only on manufactured products, to address the strength of the entire traded sector of state economies. We refined last year's *Manufacturing Investment Per Production Worker* by adding used machinery and equipment, deleting buildings, and adjusting for the differences in the capital intensity of different state economies. We moved *High Growth Companies* to the Entrepreneurial Energy subindex, and dropped *Presence of Fortune 1000 Corporation Headquarters* because it said little about competitiveness.

In the Entrepreneurial Energy subindex, we dropped *Self-Employment Rate* because the 1980 Census data on which it was based are too old to be reliable and have yet to be updated. In addition, we combined the *Minority Business Ownership* and *Women's Business Ownership* measures to reduce distortion in the results. This combined measure differs from last year in other ways as well: it includes Hispanics for the first time, and focuses explicitly upon businesses with paid employees.

Finally, we developed an entirely new Structural Diversity subindex to address the vulnerability of state economies. The fact that this subindex has but one measure has led us to give it a weight of just 10 percent in determining the overall index grades.

Subindex One: Competitiveness of Existing Businesses

Attaining and sustaining economic success is a function of the competitiveness of the businesses in a state — that is, their ability, compared to their competitors, to marshal resources and develop new technologies to create and produce new goods and services for expanding world markets. To determine how businesses in each state are doing in the competitiveness race, we use three measures: traded sector strength, business failure rate, and investment in manufacturing machinery and equipment.

Traded Sector Strength

The engine of every state economy is its "traded sector" — the businesses which produce goods and services that are exported from the state and thus bring income into the state. Traded sector businesses also strengthen state economies even when they sell within the state, if their products or services displace imports from other states or nations. The strength of the traded sector can be measured by the sum total of its "value-added" — that is, the difference between the cost of the materials that go into a product and what it can sell for. Value-added measures the inflow and retention of wealth in a state economy.

Getting a handle on value-added, and thus on the strength of the traded sector, is no mean feat. In this measure, we take the principal indicator of value-added by each state's traded sector — *income* (wages, salaries, unincorporated profits, etc.) — and divide it by the number of people employed statewide to adjust for differences in the sizes of states. (See *Appendix C* for a fuller explanation of this measure.)

Business Failure

Perhaps the most basic indicator of the competitiveness of the businesses in a state is simply whether they survive. At least theoretically, one might expect more business failures in states with high degrees of entrepreneurship, but we find that states with a high degree of entrepreneurial energy often have relatively low rates of business failure. This suggests that high failure rates are an indication of economies in trouble. This measure does not include *all* business failures, just those which went into bankruptcy or receivership, or those that were otherwise involved in voluntary actions that resulted in actual losses to creditors.

Investment in Manufacturing Machinery and Equipment

We know that what creates competitiveness and, therefore, business vitality is quality and innovation. We also know that what drives innovation is investment — the investments businesses make in people, products and physical plant. Of these, the only investments that currently are being measured state-by-state are those in machinery and equipment.

This year, we begin by measuring per worker investments in machinery and equipment (both new and used machinery, but not buildings). Then, to adjust for variations in the capital intensity of the economies of different states, we divide by value-added per worker. The resulting measure is not an ideal proxy for capital intensity, but it is the best tool currently available.[10]

Subindex Two: Entrepreneurial Energy

As we noted earlier, the birth and growth of indigenous businesses is crucial to long-term business vitality in any state. The rate of new business formation in the United States is a source of wonder to other developed nations. In 1985, for example, some 700,000 new firms were formed, compared to only 90,000 in 1950. In addition, there were 400,000 new partnerships and 300,000 people newly self-employed.[11]

The rapid generation of new jobs (and the disappearance of old ones) is a central characteristic of our new economy. In fact, more than half of the new jobs that will exist in any state in 1993 will be created by businesses that do not even exist today — businesses that often will be started by people who are not now in business and who already live in the state.[12] In addition, new firms perform a vital function in changing state economies: they replenish the jobs lost when larger companies pare their workforces to become more competitive, or when companies that fail to take such action close altogether. Finally, in state after state, it has become clear that some new businesses (which ones is impossible to predict) can spawn entire industries, which tend to grow in close proximity to the "parent" firm.[13]

Most indigenous firms are small and we know that small firms are key to economic competitiveness. And while innovation can occur in larger firms, smaller firms are generally more efficient at product and process innovations, less footloose, and able to react more quickly to changing economic circumstances.

New and small businesses are not without their own shortcomings, however. They are more likely to fail than established firms, tend to pay lower wages, and offer fewer benefits. On the other hand, they often employ workers with no previous experience and limited skills, invest in training them and, thus, increase their future employability and mobility. And while these firms fail more frequently, during the last recession, you were more likely to lose your job through contraction or failure if employed in a firm with more than 100 employees, than in one with fewer than 100.[14]

To capture the entrepreneurial energy in a state, we look at two things: the birth and growth rates of new businesses and the level of entrepreneurship among minorities and women.

New Companies

Our measure for identifying new companies is business formations per 10,000 workers in the state. Specifically, we measure the number of companies created after 1983 that employed at least 10 people by January 1987. We are interested here in the growth new firms reach, not simply the number of them that exist at any one time in a state. We found last year that the fact that a state has a large proportion of small businesses and self-employed people may have a good deal less to do with entrepreneurial energy than with entrepreneurial necessity. In many thinly-populated rural states, such businesses are simply the only game in town. Nevertheless, they are resources that can be built upon and that may become significant employers in the future. For if necessity is the mother, invention may often be the result — if recognized and nurtured.

We note that a weakness of any business formation rate is that it includes existing firms that have simply changed owners. However, this problem is common to all states and introduces no bias for or against any state that we can identify.

High Growth Companies

We can get a pretty good picture of the level of vitality in a state economy by looking at the companies that are both young and rapidly-growing. The growth patterns of these young (founded since 1978) "high fliers" tells us something about their ability to meet emerging market needs and to initiate, adapt to and take advantage of change. In this measure, "high growth" refers both to the number of jobs created *and* to the percentage of that growth. Thus we do not include large companies that may have added what appear to be a lot of jobs but which represent, in fact, only a slight overall percentage growth. By the same token, we do not include very small firms that may show a very high percentage growth, but which represents only a few jobs.

Minority and Women Business Ownership

Economies in which entrepreneurship is not widely distributed among all segments of the population — to include nontraditional entrepreneurs such as women and minorities — are missing out on sources of new economic growth. Equity in state economic performance can never be fully achieved unless all segments of the population have the opportunity to enter the "pool of entrepreneurs." Moreover, by encouraging minority and women entrepreneurs, states reap other important benefits: such businesses are more likely to put down roots in distressed communities, more likely to hire minority and women employees, and more likely to provide role models for future entrepreneurs in their communities, than are other firms.[15]

As with new companies, we have taken care in this measure to distinguish between entrepreneurial energy and entrepreneurial necessity. Women and minority business ownership has risen sharply in recent years, but many of these firms have been created by individuals who, because of barriers to participation in the mainstream economy or simply insufficient resources, are self-employed as domestics, handymen, babysitters and the like. Even so, nationwide, minorities are less likely than non-minorities to own a business — 1.8 percent of the minority population owned businesses in 1982 compared to 6.4 percent in the population as a whole.[16]

In this measure we focus only on women and minority (black and Hispanic) -owned businesses (sole proprietorships, partnerships and Subchapter S corporations) with paid employees. In addition, we measure these firms in relation to population. Again we must emphasize that high self-employment rates — whatever the cause — are resources to be developed.[17]

Subindex Three: Structural Diversity

Diversity among traded-sector industries is essential to long-term business vitality, because it decreases vulnerability to sharp changes in the fortunes of any one industry. What is important is not that an economy *looks* diverse, with employment distributed across a variety of industries, but that it *acts* diverse — that is, when one industry is declining others are stable or growing.[18]

Structural Diversity

The measure we use in this subindex is the extent to which changes in employment in one traded industry parallel — or do not parallel — changes in other industries for each year between two similar points in recent economic history (1979 and 1986). (See *Appendix C* for a fuller explanation of this measure.)

Findings

If a state does well in the Performance Index, then we should expect it to do well on the Business Vitality Index as well. Similarly, a state that does poorly on one should also do poorly on the other. And to a large extent, that is what has happened. Of the ten states receiving *A*'s in the Vitality Index, six receive *A*'s in the Performance Index as well — Delaware, Maine, Maryland, New Hampshire, New Jersey and Vermont. Moreover, all but six of the states earning *D*'s or *F*'s in this Index score a *C* or worse in the Performance Index. For the states in the middle of the Vitality Index there is no strong pattern.

The overall standings in this Index show significant differences from last year. Part of this change is due to shifts in the economic situation in each of the states — energy states are down, for example, and states with pockets of rapid growth are up. But another cause of these changes is the Index itself. The Business Vitality Index is very different this year. It measures more aspects of the vitality of businesses in a state economy and it measures some of the same things as last year more sensitively. The overall effect seems to be a moderating of the extremes, as one might expect: the high fliers are not quite as high and the trailing states, in most instances, are not as far behind.

The states at the top tend to have economies that are both *developed* (diverse and competitive in national and international markets) and *vibrant* (full of new and growing businesses). In addition, all but six of the states earning *A*'s or *B*'s are east of the Mississippi. Most of the states at the bottom of the list tend to have economies deeply dependent on natural resource development and agriculture, including Iowa, Mississippi, Nebraska, Louisiana, Oklahoma, South Dakota and Wyoming. Several others are older industrial states still struggling to overcome the effects of structural changes, including Illinois, Ohio, Wisconsin and Pennsylvania.

Competitiveness of Existing Businesses Subindex Findings

The Competitiveness subindex illustrates dramatically what it takes to succeed in today's economy: the overall leaders in this subindex, with one or two exceptions, have well-developed economies with industries that today are producing complex goods with high value-added that compete on the basis of quality. At the other extreme of this subindex are states that, for the most part, produce commodities that compete on the basis of price. They have been, and continue to be, extremely vulnerable to shifts in commodity prices — oil and grains in particular.

This broad finding is particularly borne out in the *Traded Sector Strength* measure, which is dominated by states that are centers of industrial production and financial services: Connecticut, Michigan, Delaware, New Jersey, Ohio and so forth. Many of these states have undergone dramatic restructuring since the recession earlier in the decade and appear to be in better competitive shape today. In contrast, the states at the bottom of this measure tend to have extremely insular economies: for example, New Mexico, Montana and the Dakotas.

Given the high failure rate of new businesses in general, we might expect states with high levels of entrepreneurial energy to have high business failure rates. However, the *Business Failure* measure suggests the reverse: that the "hotter" the economy, the lower the failure rate. Thus, business failure rates follow a more conventional logic: the more troubled the economy, the higher the failure rate. And in 1986, the year from which this data was taken, the states with the worst failure rates were predominantly energy-producing states: Colorado, Oklahoma, Texas, Louisiana, Wyoming and Alaska.

The *Investment in Machinery and Equipment* measure, adjusted to account for differences in the capital intensity of state economies, aims to measure the extent to which businesses in states are investing in themselves. But the results are difficult to read. The leaders in this measure tend to be thinly populated states in which significant capital projects have been undertaken in one or two major industries. Over half of the capital investment in Vermont, for example, was in electronics, an industry which represents only 20 percent of manufacturing employment in the state. The standing of the other leaders can be explained the same way: in Louisiana, by big investments in chemicals and petroleum; in New Mexico, electrical equipment; in Wyoming, chemicals, and so forth. The second tier, however, appears to more accurately reflect the states in which significant capital equipment upgrading has been underway, including Michigan and South Carolina. Patterns of disinvestment are visible at the bottom of the list: Connecticut is converting from an industrial state to a financial and information services and corporate headquarters state; and Rhode Island, despite its economic health, continues to be a low investment state.

Entrepreneurial Energy Subindex Findings

This subindex tells an interesting story about the recent history of economic growth in America. Virtually all of the leaders in this subindex are the "newly developed" states, the Japans and Koreas of the United States. They are moving from an economy based on commodities and low-wage industries to a more diverse and higher value-added economy. They are growing in size and are not bound by the old ways of doing things. These states include Arizona, New Hampshire, Florida and Vermont.

At the bottom of this subindex are two kinds of states: those states that have suffered from a legacy of chronic poverty and underinvestment (Mississippi, Alabama), and those that have economies that have depended on old, previously successful but now declining, sectors (Michigan, Pennsylvania and Iowa).

The states with the fastest growing businesses are those with a recognizable high-tech, high value-added base. Some of the states have been developed for a while (Massachusetts and New Jersey), and some are newly developed (North Carolina and Arizona).

The states with the highest rates of new company formation have had significant recent population and economic growth — even if some of them have had their wings clipped a bit recently. These include Florida, Texas, Colorado and New Hampshire.

And finally, the states with the highest rates of non-traditional entrepreneurship tend to be thinly populated states where entrepreneurship is a practical necessity. Women and minorities perceive opportunities to found their own businesses and encounter few constraints in doing so in these states. Also, states with high Hispanic concentrations tended to do well on this measure. Following right behind the thinly-populated states in this measure are the newly-developed states whose economies are changing rapidly and present high levels of opportunity to all comers. At the bottom are older industrial and Southern states where the roles of minorities and women are still set by tradition.

Structural Diversity Subindex Findings

A diverse economy is one in which the "valleys" in one sector are offset by the "peaks" in another. The effect of this offsetting behavior is stability and resilience.

At least in theory. The problem is that documenting the diversity of state economies — that is, not how diverse they look, but how they behave — is difficult in the extreme. The results illustrate the difficulty. The states which occupy the bottom 15 or so positions tend to be of two types. The first — states like Pennsylvania, West Virginia, Louisiana, Michigan, Ohio, Indiana and Illinois — have economies heavily dependent on the fortunes of a few sectors — heavy manufacturing, mining or oil, for example. When these sectors go up or down, the entire state economy follows. The second group includes states which have experienced broad-based growth during the years since 1979, including Arizona, Georgia and New Hampshire. Because all sectors rose together, these states *appear* not to be diverse, when in fact they may well be. Our measure simply doesn't distinguish the difference.

At the other end of this list are states which have sectors that *do* offset each other. New York is a good example: when its heavy manufacturing industries lagged, the slack was taken up by a booming financial and business services sector. Also at the top, however, are states we do not think of as economic success stories yet, such as New Mexico, Kansas or Arkansas, but which nevertheless score well because their economic sectors — however weak — do tend to offset each other.

Business Vitality Data

	COMPETITIVENESS OF EXISTING BUSINESSES						ENTREPRENEURIAL ENERGY						STRUCT'L. DIVERSITY	
	Traded Strength per worker		Business Fail. per 10,000 cos.		Mfg. Capital Investment		New Companies per 10,000 cos.		High Growth Companies		Min. & Wom. Bus. Ownshp.			
	$	Rank	#	Rank	%	Rank	#	Rank	%	Rank	%	Rank	Score	Rank
Alabama	7,508.1	22	58.5	15	9	10	11.79	25	2.31	30	0.52	34	0.632	19
Alaska	7,858.1	18	194.0	44	7	23	16.78	3	1.92	37	1.03	4	24.748	48
Arizona	5,985.2	45	89.7	25	10	7	21.67	1	3.57	3	0.63	24	29.533	49
Arkansas	6,877.6	35	76.4	20	9	10	10.60	30	1.82	40	0.72	14	-2.079	6
California	8,290.4	12	172.7	42	7	23	13.23	13	3.14	8	0.62	25	1.510	24
Colorado	7,109.2	30	366.5	50	7	23	15.11	5	2.27	32	0.77	12	11.057	42
Connecticut	11,321.7	1	25.4	5	5	46	8.78	46	3.18	7	0.49	40	-2.752	5
Delaware	9,954.2	3	37.4	7	10	7	10.88	29	3.54	5	0.51	35	0.620	18
Florida	4,895.5	49	128.7	32	9	10	18.57	2	2.73	16	0.78	11	1.603	26
Georgia	7,605.1	21	53.4	10	8	17	14.09	9	3.02	9	0.56	31	8.696	38
Hawaii	5,821.4	47	129.9	33	7	23	12.19	21	2.88	11	0.51	35	2.747	33
Idaho	6,149.9	44	130.5	34	9	10	12.15	22	1.56	43	0.89	9	-0.464	13
Illinois	8,777.0	7	127.6	31	7	23	8.18	49	2.42	26	0.43	49	9.173	41
Indiana	9,001.7	6	106.9	29	8	17	10.11	36	2.42	26	0.64	23	8.969	39
Iowa	7,829.9	19	93.7	26	6	38	7.56	50	1.38	45	0.72	14	9.135	40
Kansas	8,108.4	15	255.5	48	5	46	12.07	23	2.08	36	0.70	18	-5.463	1
Kentucky	7,420.5	24	135.9	35	7	23	12.44	18	1.86	38	0.60	28	1.440	23
Louisiana	6,222.0	43	213.1	46	13	3	11.83	24	1.86	38	0.68	21	16.546	46
Maine	6,922.4	32	24.2	4	11	5	10.59	32	2.43	25	1.02	5	-4.094	3
Maryland	7,065.0	31	54.3	11	9	10	14.32	8	3.66	2	0.48	42	-0.603	10
Massachusetts	8,734.9	8	57.0	14	7	23	9.38	42	3.76	1	0.38	50	0.144	15
Michigan	11,101.2	2	88.4	24	10	7	9.79	39	2.60	22	0.49	40	14.878	44
Minnesota	8,164.2	13	60.0	16	7	23	9.90	38	2.56	23	0.61	26	0.399	16
Mississippi	6,438.2	40	117.0	30	6	38	10.58	33	1.56	43	0.61	26	1.679	27
Missouri	7,110.5	29	143.7	37	6	38	10.29	35	2.28	31	0.59	29	1.682	28
Montana	4,896.9	48	71.6	19	7	23	14.08	10	1.16	48	1.66	1	-0.592	11
Nebraska	7,696.7	20	84.8	23	5	46	8.25	48	1.73	41	0.76	13	1.168	21
Nevada	6,853.9	36	176.9	43	8	17	12.81	15	2.32	29	0.54	32	7.039	37
New Hampshire	8,006.0	16	23.3	3	7	23	14.60	6	3.56	4	0.88	10	4.299	35
New Jersey	9,937.8	4	51.2	9	6	38	10.60	30	3.01	10	0.48	42	-2.036	7
New Mexico	4,668.9	50	96.0	27	12	4	14.48	7	2.14	34	0.95	8	-5.148	2
New York	8,722.8	9	36.8	6	6	38	9.39	41	2.72	17	0.44	48	-1.634	8
North Carolina	7,495.8	23	54.8	12	7	23	10.01	37	2.88	11	0.46	46	-0.632	9
North Dakota	5,915.2	46	55.9	13	8	17	10.50	34	1.08	49	0.96	7	1.929	30
Ohio	9,250.4	5	99.7	28	7	23	8.80	45	2.68	18	0.48	42	13.426	43
Oklahoma	6,534.0	38	366.0	49	7	23	12.40	19	1.31	46	0.70	18	2.438	31
Oregon	6,905.5	33	147.0	38	6	38	12.92	14	2.14	34	0.72	14	1.575	25
Pennsylvania	8,141.8	14	64.9	17	7	23	8.42	47	2.74	15	0.51	35	17.896	47
Rhode Island	7,406.4	25	16.6	1	5	46	9.01	44	2.84	13	0.48	42	0.788	20
South Carolina	6,880.5	34	49.0	8	11	5	12.24	20	2.41	28	0.46	46	-0.545	12
South Dakota	6,312.7	42	79.1	22	5	46	9.65	40	1.26	47	1.08	3	-0.021	14
Tennessee	7,362.9	26	140.0	36	8	17	11.39	26	2.68	18	0.54	32	1.775	29
Texas	7,133.7	28	213.8	47	9	10	15.74	4	2.75	14	0.68	21	4.281	34
Utah	6,449.4	39	169.7	41	6	38	13.40	12	2.68	18	0.57	30	2.511	32
Vermont	6,687.4	37	22.6	2	17	1	12.69	16	2.68	18	1.21	2	-3.135	4
Virginia	7,321.6	27	68.8	18	7	23	13.65	11	3.24	6	0.50	39	1.340	22
Washington	8,356.2	11	166.8	40	8	17	12.67	17	2.44	24	0.70	18	0.587	17
West Virginia	7,883.2	17	77.0	21	9	10	11.33	27	1.72	42	0.71	17	33.429	50
Wisconsin	8,691.8	10	148.4	39	6	38	9.14	43	2.22	33	0.51	35	5.289	36
Wyoming	6,424.0	41	200.1	45	14	2	10.97	28	1.00	50	1.01	6	15.878	45

Please refer to *Business Vitality Index Data Sources* and the *Business Vitality Index* text for further detail on individual measures.

Business Vitality Data Sources

Subindex One: Competitiveness of Existing Businesses

Traded Sector Strength

Traded sector personal income per worker, 1986.
Source: U. S. Department of Commerce, Bureau of Economic Analysis, State Personal Income Summary Tables, 1986. U.S. Bureau of Labor, Bureau of Labor Statistics, *Geographic Profile of Employment and Unemployment, 1986* (Washington, D.C.: Government Printing Office, 1987). Calculations by Mt. Auburn Associates.
See Appendix C for more information on *Traded Sector* measure.

Business Failure

Business failures per 10,000 concerns, 1986.
Source: Dun and Bradstreet, *Business Failure Record*, 1987.
"Failures" are businesses involved in bankruptcy or receivership proceedings, or voluntary actions involving losses to creditors.

Investment in Manufacturing Machinery and Equipment

Investment in new and used manufacturing machinery and equipment as a percentage of manufacturing value added, 1985.
Source: U.S. Department of Commerce, Bureau of the Census, *1985 Annual Survey of Manufacturers: Geographic Area Statistics* (Washington, D.C.: Government Printing Office, 1986).

Subindex Two: Entrepreneurial Energy

New Companies

All companies founded in 1983 or later with at least ten employees by January 1987, per 10,000 employers.
Source: "Number of New Companies," *Inc.*, October 1987. Measure developed by Cognetics in Cambridge, Massachusetts. Number of workers from U. S. Small Business Administration, *Small Business Database*.

High Growth Companies

Percent of companies in the state founded after 1978 with a growth index of 20 or more for the period January 1983 to January 1987.
Source: Inc., October 1987. Measure developed by Cognetics in Cambridge, Massachusetts.
The growth index is determined by multiplying the percent of job growth (in decimal terms) by the actual increase in the number of jobs. For example, a company which grew from 40 to 70 jobs would have an index of 22.5 — 75 x 30.

Minority and Women Business Ownership

Composite index of women-owned and minority-owned (black and Hispanic) businesses with paid employees as a percent of all women and minorities in the labor force, 1982.
Source: U.S. Department of Commerce, Bureau of the Census, *1982 Economic Censuses: Women-Owned Businesses* and *1982 Survey of Minority-Owned Business Enterprises* (Washington, DC: Government Printing Office, 1986). Calculations by The Corporation for Enterprise Development.

Subindex Three: Structural Diversity

Structural Diversity

Sum of covariances of employment change for all pairs of traded sector industries, 1986.
Source: U.S. Department of Commerce, Bureau of Economic Analysis, unpublished state employment tables, 1987.
Measure derived from formula which measures the diversity of percentage change in employment in state traded industries, 1979-86. Industry data at the 2-digit SIC level. Calculations by Mt. Auburn Associates.
See Appendix C for more information on *Structural Diversity* measure.

All per capita population calculations were made by The Corporation for Enterprise Development. Source: 1986 population, Bureau of the Census, Press Release December 31, 1986.

Endnotes

1. A good explanation of "business vitality" can be adapted from the definition of "national competitiveness" offered by the Strategy Group of the President's Commission on Industrial Competitiveness as "the extent to which state businesses can produce goods and services that meet the test of national and international markets while simultaneously maintaining and expanding the real incomes of its citizens." See President's Commission on Industrial Competitiveness, *The New Reality, Vol. II* (Washington, D.C.: Government Printing Office, January 1985).

2. See, for a discussion of the importance of innovation, Stephen S. Cohen and John Zysman, *Manufacturing Matters: The Myth of the Post-Industrial Economy* (New York: Basic Books, 1987); and Jane Jacobs, *Cities and the Wealth of Nations* (New York: Random House, 1984), among others.

3. See, for examples of the variety of innovating businesses, Thomas Peters and Robert Waterman, *In Search of Excellence: Lessons from America's Best-Run Companies* (New York: Harper and Row, 1982).

4. See, for example, Catherine Armington, *Further Examination of Recent Employment Growth Analysis of USEEM Data for 1976-1980*, (Washington, D.C.: The Brookings Institution, March 1983); The Rhode Island Strategic Development Commission, *The Greenhouse Compact*, (Providence: The Rhode Island Strategic Development Commission, 1984); and Karl Seidman, *The Role of Taxation in State Business Climate* (Washington, D.C.: The Corporation for Enterprise Development, 1987).

5. Andrew Reamer, "The Dynamics of Manufacturing Job Loss: A Case Study of Rhode Island, 1978-83," unpublished dissertation, Massachusetts Institute of Technology, 1986.

6. See especially Roger W. Schmenner, *Making Business Location Decisions* (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1982).

7. See, for example, Thomas M. Stanback, Jr., Peter J. Bearse, Thierry J. Noyelle and Robert A. Karasek, *Services: The New Economy* (Totowa, NJ: Allanheld, Osmun & Co., Inc., 1981); and William B. Beyers, Michael Alvine and Erik G. Johnsen, "The Service Economy: Export of Services in the Central Puget Sound Region," Report for the Central Puget Sound Economic Development District, Seattle, WA, April 1985.

8. See, for example, Peter Drucker, *Innovation and Entrepreneurship* (New York: Harper and Row, 1985).

9. For an example of a discussion of the importance of investments in maintaining economic competitiveness, see Ira C. Magaziner and Robert B. Reich, *Minding America's Business: The Decline and Rise of the American Economy* (New York: Harcourt Brace Jovanovich, 1982).

10. The ideal way to correct for bias towards states dominated by capital-intensive industries is to divide machinery and equipment investment by the current market value of existing machinery and equipment, which would yield the percentage of a state's equipment stock being replaced or upgraded in a given year. Unfortunately, estimates of such current market values do not exist. The second best means we could devise for correcting capital-intensity bias in the manufacturing investment measure was to divide by "value-added per worker." "Value-added per worker" is very much a function of the capital intensity of a state's industry mix, so the capital-intensity biases of *both* the investment *and* the value-added measures tend to cancel each other out. The weakness of using value-added is that it also is a function of other factors, i.e., the productivity of the workforce and the level of machinery and equipment investment in prior years. This kind of "noise" in the measure can occur if the labor productivity and capital intensity of a state's industry is significantly different from the nationwide average for that industry.

11. David Birch, "The Atomization of America," *Inc.*, March 1987.

12. See David Birch, "The Job Generation Process," MIT Program on Neighborhood and Regional Change, 1979.

13. See for a discussion of the "agglomeration" of businesses, Jane Jacobs, *op.cit.*; Harry Richardson, *Regional Economies: Location Theory, Urban Structure and Regional Change* (New York: Praeger, 1969); and D.E. Keeble, "Models of Economic Development," in R.J. Chorley and P. Haggett, *Models in Geography* (London: Methuen, 1967).

14. Candee S. Harris, "The Magnitude of the Job Loss from Plant Closings and the Generation of Replacement Jobs: Some Recent Evidence," *The Annals of American Academy of Political and Social Science*, September 1984. See also Robert Meyer, "Structural Change and Job Dislocation," unpublished paper, The Brookings Institution, April 1984. While younger and smaller businesses are more likely to fail and close than older, larger firms, these loss rates are often overstated and are, in any case, overshadowed by firm birth and expansion rates. Less than one percent of all businesses fail each year with a loss to creditors. Of these, 80 percent have survived their first two years, with the big failure rates occurring in years three, four and five — by the end of which period 61 percent of the failures will have occurred. A larger percentage of businesses — eight to nine percent — close each year for a variety of other reasons, many having little to do with the intrinsic value of the business, and these too tend to be younger and smaller, though not exclusively so. Kibre Dawit and Robert Friedman, "Myths of Small Business Failure," *The Entrepreneurial Economy*, July 1982.

15. See, for example, Eugene P. Foley, "The Negro Businesswoman: In Search of a Tradition," *Daedalus*, Winter 1966; Federico V. Magdalena, "The Filipino Entrepreneurs of Hawaii: An Inquiry into their Roots and Success," unpublished doctoral dissertation, University of Hawaii, 1977; Bernard Saracheck, "Jewish American Entrepreneurs," *Journal of Economic History*, June 1980; David Caplovitz, *The Merchants of Harlem* (Beverly Hills, CA: Sage Publications, 1973); and Janice K. Demarest, "Women Minding Their Own Business: A Pilot Study of Independent Business and Professional Women and Their Enterprises," unpublished doctoral dissertation, University of Colorado, 1977. A survey of inner city businesses in Buffalo revealed that nearly 100 percent of full-time employees in black-owned firms were blacks, while only 21.5 percent of the employees of white-owned businesses were

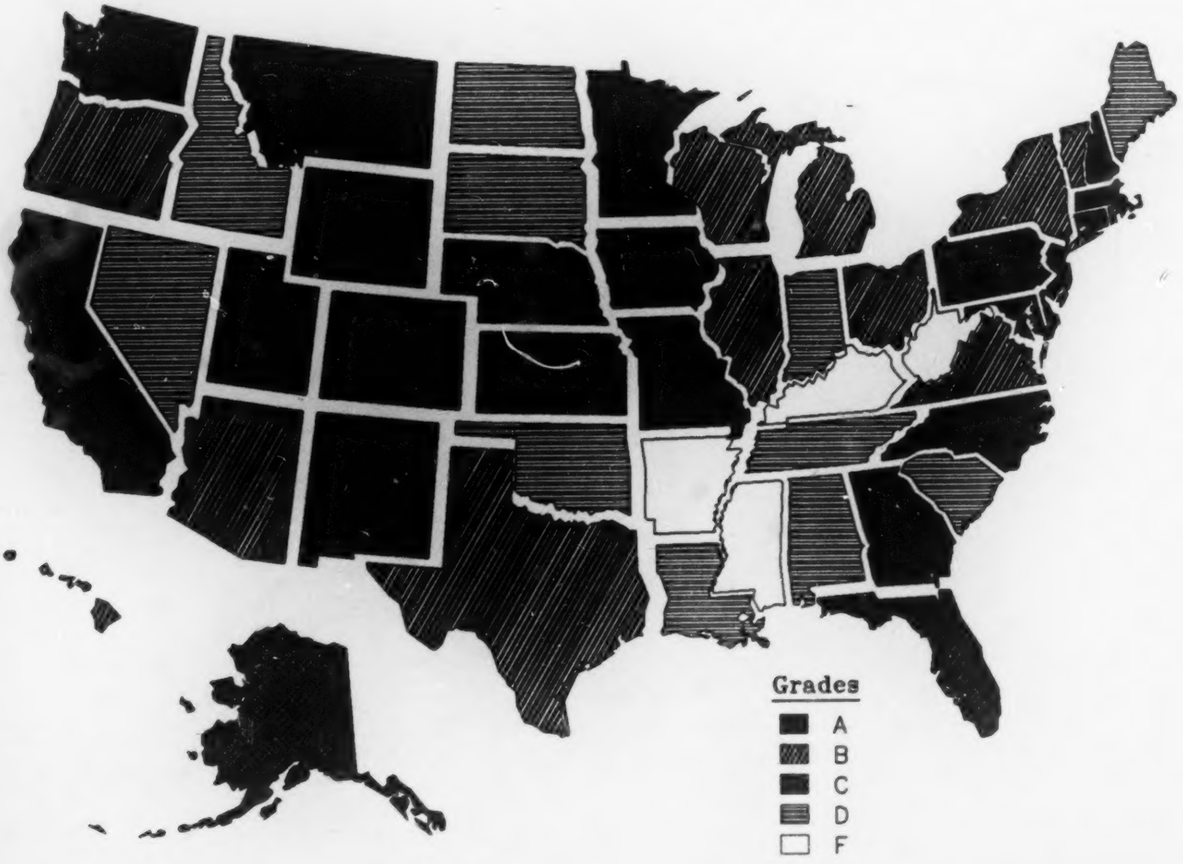
black. For a review of minorities and enterprise development, see The Corporation for Enterprise Development's *The Entrepreneurial Economy*, April 1984.

16. U.S. Small Business Administration, *The State of Small Business: 1987* (Washington, D.C.: Government Printing Office, 1987).

17. For each of the three groups of non-traditional entrepreneurs — women, blacks and Hispanics — we calculate the percentage of each group which operates businesses with paid employees. We then construct a single index of non-traditional entrepreneurship by combining the percentages for the three groups, with women accorded half the weight and black and hispanics receiving one quarter each. We chose this weighting scheme to roughly take into account differences in the size of the population groups.

18. H.L. Brewer, "Regional Economic Stabilization: An Efficient Diversification Approach," *Review of Regional Studies*, 1987.

3 The Capacity Index


Grades
A
B
C
D
F

Capacity Report Card

	Human Resources Subindex		Technological Resources Subindex		Financial Resources Subindex		Infra./Amen. Capacities Subindex		FINAL GRADE	
	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade
Alabama	**44**	**D**	**33**	**C**	**41**	**D**	**44**	**D**	**45**	**D**
Alaska	11	B	32	C	35	C	42	D	33	C
Arizona	**35**	**C**	**16**	**B**	**13**	**B**	**15**	**B**	**17**	**B**
Arkansas	42	D	50	F	45	D	40	D	48	F
California	**29**	**C**	**7**	**A**	**3**	**A**	**6**	**A**	**7**	**A**
Colorado	6	A	2	A	26	C	2	A	2	A
Connecticut	**8**	**A**	**6**	**A**	**6**	**A**	**21**	**C**	**4**	**A**
Delaware	26	C	9	A	11	B	1	A	8	A
Florida	**45**	**D**	**39**	**D**	**20**	**B**	**12**	**B**	**30**	**C**
Georgia	39	D	41	D	19	B	11	B	28	C
Hawaii	**25**	**C**	**25**	**C**	**21**	**C**	**5**	**A**	**15**	**B**
Idaho	10	A	30	C	45	D	47	F	38	D
Illinois	**36**	**D**	**22**	**C**	**5**	**A**	**22**	**C**	**20**	**B**
Indiana	30	C	28	C	32	C	44	D	41	D
Iowa	**18**	**B**	**19**	**B**	**39**	**D**	**46**	**F**	**35**	**C**
Kansas	12	B	36	D	33	C	39	D	33	C
Kentucky	**47**	**F**	**49**	**F**	**30**	**C**	**48**	**F**	**47**	**F**
Louisiana	49	F	42	D	28	C	43	D	45	D
Maine	**22**	**C**	**47**	**F**	**44**	**D**	**31**	**C**	**43**	**D**
Maryland	12	B	3	A	23	C	4	A	6	A
Massachusetts	**9**	**A**	**1**	**A**	**2**	**A**	**28**	**C**	**3**	**A**
Michigan	28	C	17	B	14	B	26	C	20	B
Minnesota	**3**	**A**	**12**	**B**	**9**	**A**	**3**	**A**	**1**	**A**
Mississippi	49	F	46	F	49	F	50	F	50	F
Missouri	**33**	**C**	**24**	**C**	**22**	**C**	**38**	**D**	**31**	**C**
Montana	1	A	44	D	36	D	36	D	31	C
Nebraska	**4**	**A**	**34**	**C**	**40**	**D**	**18**	**B**	**25**	**C**
Nevada	33	C	29	C	48	F	23	C	40	D
New Hampshire	**15**	**B**	**20**	**B**	**33**	**C**	**23**	**C**	**22**	**C**
New Jersey	19	B	14	B	8	A	7	A	9	A
New Mexico	**30**	**C**	**5**	**A**	**42**	**D**	**29**	**C**	**26**	**C**
New York	37	D	8	A	1	A	29	C	14	B
North Carolina	**40**	**D**	**35**	**C**	**17**	**B**	**17**	**B**	**27**	**C**
North Dakota	19	B	38	D	43	D	32	C	38	D
Ohio	**24**	**C**	**14**	**B**	**18**	**B**	**23**	**C**	**17**	**B**
Oklahoma	27	C	31	C	30	C	41	D	37	D
Oregon	**16**	**B**	**26**	**C**	**12**	**B**	**20**	**B**	**13**	**B**
Pennsylvania	32	C	12	B	7	A	9	A	10	A
Rhode Island	**38**	**D**	**10**	**A**	**10**	**A**	**37**	**D**	**24**	**C**
South Carolina	45	D	43	D	37	D	16	B	42	D
South Dakota	**19**	**B**	**48**	**F**	**25**	**C**	**34**	**C**	**36**	**D**
Tennessee	48	F	40	D	23	C	35	C	44	D
Texas	**43**	**D**	**23**	**C**	**4**	**A**	**10**	**A**	**19**	**B**
Utah	17	B	4	A	37	D	33	C	22	C
Vermont	**2**	**A**	**26**	**C**	**27**	**C**	**18**	**B**	**12**	**B**
Virginia	22	C	20	B	15	B	13	B	11	B
Washington	**7**	**A**	**10**	**A**	**16**	**B**	**8**	**A**	**4**	**A**
West Virginia	41	D	45	D	50	F	49	F	49	F
Wisconsin	**5**	**A**	**18**	**B**	**29**	**C**	**26**	**C**	**16**	**B**
Wyoming	12	B	37	D	47	F	14	B	28	C

3

CAPACITY

In the race for the economic future, some of the competitors have a distinct advantage: they are simply in better condition. Investments have been made to ensure that they were well prepared at the start and that they are well nourished throughout.

There are four kinds of economic conditioning or capacity-building investments in which states and their political subdivisions are principally involved: building an educated and skilled workforce, supporting technological innovation, assuring available financial resources, and creating and maintaining physical infrastructure and amenity resources. These are the building blocks of state economies. How well-developed they are, and how they are used, will have a lot to do with future economic performance and how attractive the state is for new economic development.

In the last decade, various crises — in infrastructure, environment, public education, adult literacy, technology development and commercialization, among others — have precipitated significant increases in investments in these building blocks in many states. But despite this progress, many of our international competitors are still in better condition. Compared to other advanced industrial economies, for example, our labor force has lower literacy rates, poorer math and science skills and higher school dropout rates. Moreover, we invest less in civilian research and development.[1]

In this Capacity Index, we have developed four subindexes that correspond to each of the building blocks. These subindexes do not predict the future, but they do define the boundaries of the possible — the *capacity* for a state's economic success — under current conditions.

What's Different This Year

This year's Capacity Index reflects a number of revisions. At the subindex level, we combined last year's Infrastructure and Amenities subindexes to reflect how closely related they are, and we eliminated last year's Entrepreneurial Culture subindex in favor of the entrepreneurship measures in the Vitality Index.

At the individual measure level, there have also been several changes. In the Human Resources subindex, we added a basic *Adult Illiteracy* measure, and we moved several measures having to do with state commitment to education to the Policy Index where they are more appropriate.

We gathered technology-related measures from last year under a subindex of their own to reflect their increasing importance in economic development in general, and global competitiveness in particular.

We made two revisions in the Financial Resources subindex. First, we narrowed the banking data to include only banks headquartered in the U.S. and only the loans they make to U.S. addresses, in an effort to focus more clearly on financial resources more directly related to state economic performance. There are still difficulties with this measure — we don't know precisely who has received loans, for example — but it is an improvement. Second, the venture capital measure this year addresses actual investments in the state, not simply whether venture capital organizations are located there.

In the Infrastructure and Amenities subindex, the *Highway Condition* measure is more comprehensive than last year. We added a measure of *Bridge Condition*, and dropped last year's *Airport Capacity* measure because so many airports serve regional markets that the measure was misleading. Among the Amenity measures, we added *Housing Cost*, a crucial measure of liveability, and *Tourism Spending*, a measure of the attractiveness of a state to others. Finally, we moved *State Arts Agency Appropriations* to the Policy Index.

Subindex One: Human Resource Capacity

Economic development is a profoundly human process. While each of the subindexes in this chapter is important to state economies, it takes people — skilled, educated, adaptable, innovative people — to take these building blocks and create the structure of an economy. The more skilled the people, the stronger and more lasting the structure of the economy they build.[2]

The skills of a state's workforce, and the extent to which those skills are adaptable to changing economic circumstances, are the most basic components of its human resource base. The kind of diversified economic activity that will generate expanding opportunity and better-paying jobs demands an increasingly broad range of skills: language skills more comprehensive than just basic reading; computational skills more advanced than just arithmetic; reasoning skills, management and entrepreneurial skills, and personal and interpersonal skills of the sort needed in group production situations. The demand for these skills is accelerating. A recent forecast commissioned by the Labor Department predicts that more than half of all new jobs generated between now and the year 2000 will require some education beyond high school.[3] The more the workforce possesses these skills and management makes use of them, the more competitive state economies will be.[4]

While we would like to be able to measure actual skill levels within and across industries in state economies, no such information exists. Instead, this subindex measures high school graduation rates, adult illiteracy rates and college educational attainment rates.

High School Graduation

In an economy in which the most basic qualification for most of the new jobs being created is high school completion, a state's economic competitiveness will be affected directly by its ability to produce new entrants to the workforce that meet this basic test of work-readiness. Despite differences from state to state in the level of competence associated with a high school education, and the national controversy over the inadequacy of the skills possessed by those who do graduate, this measure is still the best baseline we have from which to gauge the skill level of tomorrow's workforce.

Adult Illiteracy

We also need to understand the skill level of today's workforce if we are to assess the capacity of a state's economy to compete. Since nearly three-quarters of the workforce for the year 2000 is already out of school, competitiveness is directly related to the literacy levels of adults now in the workforce. Unfortunately, literacy requirements in today's workplace run well ahead of the data we have on adult literacy. Although we know that a wide range of skills is needed to secure work in today's economy, the only comprehensive literacy data available for this measure is the U.S. Department of Education's English Language Proficiency Survey. It addresses only reading ability and, at that, only whether adults read at the fourth grade level.

College Education Attainment

In an economy in which knowledge is itself a traded commodity, the higher the educational attainment of the population, the greater the capacity of the state's economy to compete. This measure identifies the percentage of the population aged 25 or older with at least a college education.

Subindex Two: Technological Resource Capacity

Technological innovation produces the seeds from which businesses and economies grow. This is true not just of "high tech" businesses but, increasingly, of *all* businesses — from steel to finance, auto parts to textiles. The rapid acceleration of technological innovation has reshaped dramatically the economic landscapes of states: the computer industry rises from the ruins of Massachusetts' industrial past; robotics and machine vision revitalize heavy manufacturing in the industrial Midwest.[5]

Technological innovation transforms state economies in three ways: by creating entirely new industries when research spawns new products that meet or create new market demand; by improving existing products and rejuvenating existing markets; and by changing production processes in ways that lower costs, improve quality, or both. Often these are small advances, incremental increases in efficiency that provide a slight, often temporary, competitive edge. The more frequently these incremental advances occur, the stronger the state economy and the greater the growth in direct and indirect employment and income. Moreover, innovation begets innovation. That is, as the pool of innovators and the investments in research and development in a state increase, the number of businesses spawned or attracted by the innovation grows, reducing out-migration and increasing in-migration of workers and technicians and, in the process, generating new applications of the technologies being developed — and the more new businesses.[6]

People — highly trained management and technical specialists — and money — expenditures in research and development — drive this process. Accordingly, this subindex examines the potential pool of innovators in a state, and the pool of dollars devoted to research.

Scientists and Engineers in the Workforce

The larger the potential pool of innovators in a state, the greater the likelihood that the capacity for innovation will become the reality of innovation. Not all innovators are scientists or engineers, and not all scientists and engineers are innovators. But there is a direct correlation between the technical capacity of the labor force and an economy's ability to generate new technology-based or -enhanced businesses, and that is what we seek to measure here.

Science and Engineering Doctoral Students

This measure indicates the how extensive science training is in a state, though not the number of degree recipients who stay in the state. Nevertheless, the history of industrial innovation indicates that new businesses are spawned, more often than not, in the same place entrepreneurs received their degrees — if only to assure a steady flow of new talent. Thus, as above, we can indirectly measure the capacity for innovative business development by assessing the technical strength of the workforce.

Patents Issued

This measure aims to capture the *rate* of innovation in a state. It is weakened by the fact that patents are generally issued at the location of the company headquarters, not necessarily the lab where the innovation is developed.

University Research and Development

The close correlation between world-class university research institutions and commercial spin-off businesses has been lost on no state. Interest in the research agendas of major educational institutions has risen sharply. Budget allotments to public universities have also increased. And new university-government-industry partnerships are being formed. This measure gives us a rough approximation of the scale of research and development spending at universities in each state and the capacity for associated business development.[7]

Federal Research and Development

There is a similar correlation between federal R&D spending and new business spin-offs. But the relationship varies significantly, depending upon what *kind* of research is underway. In states where much of the federal research is classified, the problem of getting the results "over the fence" and into the state economy can be considerable.

Subindex Three: Financial Resource Capacity

The relative availability of capital in a state sends a signal to would-be entrepreneurs that their ideas can become businesses in that state, and at the same time provides the wherewithal for businesses already in the state to continue to grow. The more developed the network between bankers, venture capitalists and other financiers, businesspeople and state economic development officials, the greater the capacity for growth in the state.

The kind of capital a business requires depends on what stage of development it is in. In its infancy, as ideas are being developed and commercialized, a business needs small amounts of "patient" money — equity and relatively long-term debt. As it matures and expands it needs larger amounts of equity, working capital to finance inventory, marketing and accounts receivable, and debt financing to acquire land, buildings and equipment. To stay competitive, it will also need long-term debt and equity to finance retooling and, in some cases, ownership changes. The unavailability of capital at any of these stages can bring the entire enterprise to a halt.

State officials and business owners alike often complain about "capital gaps" in their state — the unavailability of money for expansion or start-ups, for example. This gap is more than likely to be a lack of access to capital that already exists in a state. Sometimes the gap is more perceived than real: there may be a difference in a business' desire for capital and its qualifications for acquiring capital. But fundamentally, capital availability depends upon both the underlying capital resources of the state's financial institutions *and* the how aggressively those institutions invest those resources in local businesses.

And while capital markets are increasingly national, and even international, there are still wide variations in capital availability from state to state. Some states have more competitive commercial and investment banking than others. Not all bank services and products are available universally. Formal venture capital, while increasingly mobile, still tends to be invested near where the venture firm is based, so that it can be monitored easily. And the *level* of financial resources that can be made available varies from state to state. Thus, the extent of capital gaps and their affect on development can differ significantly across the nation.

While the subject is complex (and often contentious), this subindex provides a general picture of the financial resource capacity of states, using five measures: bank deposits, loans to equity, commercial and industrial loans, venture capital, and dividends, interest and rent income.

Bank Deposits

Since deposits form the base from which banks invest, this measure provides the most basic indicator of capital availability within a state. The higher the level of deposits, adjusted for population size, the more funds there are available for lending.

Loans to Equity

Equity — the original investment of the a bank's founders plus any accumulated undivided earnings — is the base from which banks make investments. The more aggressive the bank, the more leveraged this base is in loans to consumers and businesses. This measure is designed to begin to get at how extensive commercial banks' participation is in investments that will strengthen a state's economy.

Commercial and Industrial Loans

To measure how well financial institutions are serving businesses, we first take the total of their commercial and industrial loans, and then adjust for differences in the size of the commercial and industrial sector among states by dividing by the number of non-agricultural employees in the state. This adjustment provides an indication of demand. A weakness with this measure is that the loans made by a bank in a state can be to businesses located outside that state.

Venture Capital Investments

Venture capital firms provide early-stage capital for firms with high growth potential and, as a consequence, can be instrumental in the formation and expansion of growth industries. Active venture capital participation in a state is an indicator of a rapidly developing economy and multiple investment opportunities.

Dividend, Interest and Rent Income

This measure is an indicator of the wealth of the state's residents and their ability to make investments. It is also indirectly indicates the potential availability of seed capital for new enterprises.

These measures cover a range of financing needs, from risk capital to fixed-asset financing and working capital available from commercial banks. Because of the limitations of published financial data, these measures cannot tell us what kind of businesses are receiving financing (their size, sector, location, or stage of development), about the specific types of financial instruments provided, or how the financing was used. Moreover, there are other players in the capital marketplace. They are not included here for several reasons. Thrift institutions, for example, are now able to provide business loans, but they have been slow to enter the market and are not, as yet, important sources of business capital. Commercial finance companies, while increasingly important sources of capital for small businesses, are not regulated and little information is available about their impact on a state-by-state basis.[8] Insurance companies are another source of capital for corporations, but state-by-state data on them are not available.

Finally, state governments have become increasingly important actors in the capital marketplace by creating their own public or publicly-chartered venture capital and business lending programs, by adjusting their own investment policies, and by regulating private capital institutions more strategically to achieve public development objectives. This increasingly important source of financial resource capacity is discussed in the Policy Index.

Subindex Four: Physical Infrastructure and Amenity Resource Capacity

Almost without exception, surveys of businesspeople and public officials concerned about economic development rate two issues at the top of any list of factors important to development: the condition of the basic infrastructure of the community or state, and the quality of the amenities in the area.[9]

Physical infrastructure and amenities — roads, bridges, water systems, sewage collection and treatment systems, housing stock, parks and recreation facilities, and cultural institutions — form the basic foundation upon which businesses build, and are crucial to attracting and keeping the employees businesses need to grow.

Broken water mains, overtaxed treatment plants, collapsed bridges and a pervasive failure of public agencies to invest in the maintenance of these facilities led to widespread public concern about America's "infrastructure crisis,"[10] precipitated a number of studies that proved conclusively how such facilities contributed to state economies, and led many states to rededicate themselves to improving these facilities as a central part of their economic development strategies.[11] In a similar vein, states and communities have begun to restore and enhance the amenities that define the quality of life in an area and have made substantial investments to turn amenity liabilities (such as polluted rivers and harbors and decaying waterfronts) into showcase amenity assets.

For two issues so important to the economic capacity of state, the absence of clear indicators is especially frustrating. The measures available are limited. To begin to explore the infrastructure and amenity resource capacity of states, we examine highway condition, unmet sewage treatment plant needs, bridge ratings, housing cost, the availability of doctors, distribution of foundation grant funds, and tourism spending.

Highway Condition

In an economy in which the majority of all goods are transported by truck, highway conditions are not just a measure of state infrastructure commitment, but a fundamental measure of competitiveness as well. This year we measure the percent of rural and urban interstate highway mileage with poor serviceability ratings, according to the Federal Highway Administration, a more comprehensive indicator than that used last year.

Bridge Condition

For the same reasons, this year we also examine bridge ratings — specifically, the percent of deficient bridges on public roads in each state, based upon an annual report to Congress by the Federal Highway Administration.

Sewage Treatment Needs

Without adequate sewage treatment plant capacity, existing businesses are constrained and new businesses must seek other sites. Using EPA data, we measure the dollar amount of unmet sewage treatment plant needs on a per capita basis.

Housing Cost

Many areas of the nation face shortages of available housing that threaten to constrain development prospects. However, no adequate assessments of housing quality are available at present. We explore this issue by considering the cost of housing as a percent of personal income, based upon a weighted average of fair market rent schedules for a standard unit of housing in metropolitan areas calculated by the U.S. Department of Housing and Urban Development. We assume a direct relationship between availability and costs — that is, the scarcer the housing, the higher the cost of what is available.

Doctor Availability

The number of doctors per capita is a useful though incomplete measure of the ease with which residents can obtain basic medical care and, by extension, an indirect measure of community well-being.

Foundation Grant Funds Distribution

Measuring the distribution of foundation grant funds provides us with an indirect way to capture charitable, volunteer and non-profit activities that create an environment of caring, enriching both states and the people who live in them, from the youngest to the oldest. This measure helps us understand a part of what people mean when they say: "This is a good place to live."

Tourism Spending

Another way to understand whether "this is a good place to live" is to observe people's behavior — specifically how much people inside and outside a state pay to participate in recreation and tourism activities in a state. While this is an indirect measure of amenities, it has the advantage of being able to reveal how people *value* the amenities in a state — from amusement parks to campsites.

Findings

The clear message of the state standings in the Capacity Index, perhaps even clearer than last year, is that if you want an economy that performs well and that produces jobs and income that are widely shared, a long-term commitment to investing in the basic foundations of the economy — an educated workforce, basic research, physical infrastructure and amenities, and financial capital — is essential.

In fact, virtually the only states at the top of the Performance Index that are not *also* at the top of the Capacity Index are states that owe the lion's share of their booming economies to spillover effects from Massachusetts — a state with consistently strong capacity investments.

What's more, the states that score well on the Capacity Index — such as Massachusetts, Maryland, Connecticut and New Jersey — are likely to continue to hold their leads. Having made significant investments for the future, these states are ensuring that their success is no "flash in the pan."

In the second tier of this Index are several states that have a good record of commitment to capacity-building and more recent rebuilding, but that either have been faced with massive economic restructuring (including New York, Wisconsin, Ohio and Michigan, for example) or are currently living through a cyclical transition (Oregon and Texas, for example).

At least one state -- New Mexico — performs reasonably well with a *C* on the Capacity Index thanks largely to the national research labs it hosts. But it may never be able to translate these assets into economic performance due to the limitations of its workforce and the fact that much of the research is "top secret" and, therefore, difficult to commercialize.

At the opposite end of this Index, the picture is just as clear. Nearly all of the states receiving *D*'s or *F*'s are rural Southern or Appalachian states, including Arkansas, Kentucky, Mississippi and West Virginia. With very few exceptions, the relationship between Capacity and Performance is direct. Virtually all of the low performing Capacity states' economies are performing poorly (Maine, Indiana and Nevada are the exceptions). The reasons are the same for all of them: a legacy of low educational attainment levels, limited technological and research capacity, modest or minimal capital markets, and a history of inadequate investments in physical infrastructure. Thanks to the work of Southern leaders and institutions like the Southern Growth Policies Board, the tide is beginning to turn in the Southeast, though it may be a while before the payoff is widely visible. On the other hand, there is little evidence of a similar consistent commitment in the rural Western and Plains states at the bottom of this list.

Human Resource Subindex Findings

Perhaps the most intriguing finding from the Human Resource subindex is that to generate and support significant economic growth, it isn't enough to have relatively high adult literacy and high school graduation rates; you must also have high college attainment levels. Indeed, there are indications in several states — including Colorado, Alaska, Hawaii, California and New York, for example — that a high ranking in college attainment can offset modest and even poor high school graduation and/or literacy rates, ***even if the college attainment levels are due to "imported" talent.*** To an extent, there is something almost self-fulfilling about this issue: states that lack significant employment opportunities often find that their best-educated children are their principal "export."

Nearly three-quarters of the states with *A*'s or *B*'s in this subindex are rural, fairly remote states that have historically placed a high value on high school completion. Public schools tend to be community focal points in these states. As a consequence they also tend to have very high overall adult literacy levels. The problem these states face, in terms of future competitiveness, is that high school is where many of them stop. On the measure of college attainment, many of these same states have only mediocre scores.

At the bottom of this index are those states which score uniformly poorly in all three measures of educational attainment, and all are Southern or Appalachian states.

Technological Resource Subindex Findings

The Technological Resource subindex illustrates the close relationship between economic performance and the existence of a strong technology research base. It also illustrates the limitations of this relationship. To a greater or lesser degree, the states that receive *A*'s and *B*'s in this subindex have world-class research universities, technology-producing corporations, national labs — or all three.

Many of the leaders in the Performance Index — Massachusetts, Connecticut, Maryland and Delaware, for example — are also leaders in the Technology subindex. The competitiveness of their economies is driven, to a significant extent, by their ability to convert high proportions of technology specialists and research dollars into businesses and jobs. Ironically, two other leading technology research states — New Mexico and Utah — have been unable to make this conversion. We suspect the reason is the nature of the research itself. These states have found it extraordinarily difficult to get the defense-related and typically "top secret" results of this research "over the fence" — that is, commercialized in such a way that it spawns new local companies and new jobs.

At the other end of the spectrum are what might best be described as "low tech states." They have few scientists and engineers in their population, are producing relatively few new ones in their universities, and have limited federal and university R&D funding. As elsewhere, they tend to be Southern, rural, or both.

Financial Resource Subindex Findings

The results of this subindex read like a catalogue of the financial "haves" and "have nots." The top of the subindex is dominated by the states with the strongest national and international financial markets and institutions: New York, Massachusetts, California, Texas, Illinois and Connecticut, among others.

Right behind these leaders are several of the nation's emerging financial centers: Georgia, North Carolina, Delaware and Florida, among others. Increasingly, the banking centers in these states — Atlanta, Raleigh-Durham, Wilmington and Miami — are becoming major forces in the future of not just the states where they are located, but of entire regions as well.

In addition, we note the sharp increase in the financial capital standings of Michigan, which in the last few years has created the most advanced capital market innovations in the nation and, through public pension fund investment reform, the largest venture capital investment institution in the nation.

At the bottom of this subindex are a number of states in the South, the Plains and the Mountain West — predominantly rural states chronically short of capital. It is worth noting, however, that there may well be a cause and effect relationship between the relative lack of capital in these states and the growing strength of the regional capital centers that serve them

— Georgia in the South, for example, Texas and Colorado in the Southern Plains and Southwest, and Minnesota in the Northern Plains. When businesses in these states need capital and local institutions cannot provide it, they may turn to the regional centers. What might be lost in having to approach these regional centers is a responsiveness and sensitivity to local conditions.

Infrastructure and Amenity Resource Subindex Findings

Overall, the clearest pattern in this varied subindex is at the bottom end: states that do poorly on the Performance Index, perhaps not surprisingly, do poorly on the Infrastructure and Amenity subindex as well. Moreover, they tend to be Southern or energy industry-dependent states as well.

Just above this bottom tier are most — but not all — of the nation's older industrial states. Were this subindex limited to infrastructure, it is likely many of these states would be at the bottom; they still have not overcome a legacy of postponed maintenance. They would be joined by other, poorer states that have also long postponed needed improvements, including Kentucky and West Virginia, among others.

Within the individual measures in this subindex are several revealing stories. The *Doctor Availability* measure underscores what many residents of rural states already know: there is a clear shortage of doctors in our most thinly populated states. The leaders in this measure are principally states that host several large research hospitals and medical institutions. In the "housing" measure, it would appear that the states at the bottom of the list are smaller states with very dominant metropolitan areas that are "sellers' markets" — that is, there are relatively fewer housing units of the type measured, and they cost more, as a percentage of total income. States at the top of the list in the housing measure appear to be those with declining industrial cities that have excess capacity in the type of housing measured — in short, a clear case of more supply than demand. Finally, in the *Sewage Treatment Needs* measure, the states that have fallen the most since last year tend to be fast-growing states that appear to be outstripping current capacity.

In the end, given the variety of the measures in this Index, the clearest picture is at the Index-wide level and the message is clear: investments in capacity are directly linked to eventual economic performance increases. Postponing such investments simply mortgages the future.

Capacity Data

	HUMAN RESOURCE CAPACITY						TECHNOLOGICAL RESOURCE CAPACITY										FINANCIAL	
	High School Graduation		Adult Illiteracy		College Attainment		Sci. & Engin. per 1,000 wkrs.		Sci./Eng. Stud. per 1,000		Patents Issued per 1,000 pop.		Univ. R&D per capita		Fed. R&D per capita		Bank Deposits per 1,000 pop.	
	%	Rank	%	Rank	%	Rank	#	Rank	#	Rank	#	Rank	$	Rank	$	Rank	$	Rank
Alabama	63.0	44	13	31	12.6	45	38.5	31	10.9	36	0.65	44	32.6	31	293.4	9	5,725	46
Alaska	67.1	38	7	2	22.4	2	47.7	15	7.5	47	0.49	46	51.8	12	91.8	25	7,610	22
Arizona	64.5	40	12	25	16.8	19	37.0	34	21.6	5	1.83	13	48.4	17	120.0	22	7,172	26
Arkansas	75.7	21	15	40	9.7	50	32.7	39	4.9	49	0.28	49	14.9	49	17.3	49	6,681	34
California	65.8	39	14	33	19.8	6	56.2	6	15.8	15	1.95	11	50.8	15	426.6	7	7,707	19
Colorado	72.2	30	8	4	23.0	1	64.8	2	22.6	4	1.56	18	53.8	11	500.8	4	6,555	36
Connecticut	80.4	10	12	25	21.2	3	63.2	4	13.6	28	4.06	2	61.2	6	180.9	13	8,240	15
Delaware	69.9	35	11	17	16.3	21	54.5	7	18.8	7	4.34	1	45.5	22	47.4	34	24,117	1
Florida	51.2	49	15	40	14.7	34	29.1	48	10.8	37	1.00	26	20.1	45	124.1	19	7,402	24
Georgia	62.6	46	14	33	15.3	27	31.8	43	10.8	39	0.66	42	46.7	19	41.1	38	6,253	40
Hawaii	73.8	26	15	40	20.3	4	42.8	26	18.5	8	0.40	48	54.0	10	51.8	32	8,769	11
Idaho	76.7	15	8	4	16.1	22	44.8	22	10.3	41	0.93	29	23.7	41	266.2	10	5,916	42
Illinois	74.0	25	14	33	14.5	35	42.0	28	15.8	16	2.04	8	37.9	27	64.5	29	9,420	6
Indiana	76.4	16	11	17	12.4	46	44.6	23	14.0	25	1.56	17	32.0	32	53.6	31	7,346	25
Iowa	86.5	3	10	14	14.1	38	40.0	29	17.8	10	1.17	24	51.3	14	78.6	27	9,133	8
Kansas	81.4	9	9	9	15.7	25	33.6	38	17.3	11	0.75	35	29.8	37	45.9	37	8,743	12
Kentucky	68.2	36	15	40	11.0	48	30.8	44	7.8	46	0.67	41	17.6	46	15.8	50	7,027	29
Louisiana	54.7	50	16	47	13.4	42	37.8	32	9.9	42	0.82	34	29.9	35	20.4	48	7,003	30
Maine	78.6	11	11	17	14.0	39	39.2	30	4.6	50	0.58	45	16.5	47	30.7	43	4,447	49
Maryland	77.7	12	12	25	19.8	6	58.5	5	14.8	19	1.38	21	133.3	1	1,011.0	2	6,513	37
Massachusetts	76.3	17	11	17	20.0	5	64.5	3	36.0	1	2.53	4	110.3	2	555.6	3	10,056	4
Michigan	71.9	31	11	17	15.2	29	52.5	10	15.3	18	2.27	6	37.3	28	50.3	33	6,782	31
Minnesota	90.6	1	9	9	16.7	20	47.2	16	13.8	26	2.21	7	47.9	18	122.2	21	9,240	7
Mississippi	61.8	48	16	47	13.0	44	30.0	46	8.8	44	0.24	50	22.7	43	54.5	30	5,756	44
Missouri	76.1	18	12	25	14.0	39	46.7	17	13.0	29	0.95	28	36.8	30	133.8	17	8,592	14
Montana	82.9	8	8	4	17.3	15	29.3	47	11.1	35	0.65	43	32.0	33	31.7	42	7,479	23
Nebraska	86.9	2	9	9	16.1	22	37.8	32	14.5	21	0.83	33	43.7	23	25.7	45	9,053	9
Nevada	63.9	42	9	9	15.1	31	52.5	10	5.6	48	0.72	36	23.7	40	480.8	6	6,279	39
New Hampshire	75.2	22	9	9	18.4	13	49.7	13	8.6	45	2.28	5	41.1	25	132.4	18	6,693	32
New Jersey	77.3	13	14	33	18.6	12	53.3	9	14.3	24	3.60	3	23.7	42	233.7	12	7,752	17
New Mexico	71.9	31	14	33	17.3	15	50.0	12	17.9	9	0.95	27	80.1	3	1,690.3	1	5,763	43
New York	62.7	45	16	47	18.7	11	45.8	21	23.7	3	1.77	14	58.9	7	178.0	14	14,379	2
North Carolina	70.3	34	14	33	13.4	42	30.3	45	12.5	31	0.85	31	42.8	24	78.7	26	6,146	41
North Dakota	86.1	4	12	25	15.2	29	24.5	50	14.3	23	0.69	38	48.8	16	39.8	39	8,958	10
Ohio	76.1	18	11	17	14.8	33	48.7	14	17.2	12	1.97	10	26.9	38	148.1	16	6,459	38
Oklahoma	71.1	33	11	17	15.7	25	46.1	20	12.8	30	1.86	12	29.9	36	22.4	46	7,670	20
Oregon	72.7	29	8	4	17.2	17	42.3	27	13.7	27	1.42	19	45.7	20	47.4	34	5,361	48
Pennsylvania	77.2	14	12	25	13.8	41	46.7	17	15.7	17	2.01	9	45.6	21	109.4	24	8,614	13
Rhode Island	67.6	37	15	40	15.3	27	36.2	36	20.4	6	1.04	25	65.8	5	403.1	8	8,131	16
South Carolina	62.4	47	15	40	14.2	36	32.1	42	10.5	40	0.71	37	24.2	39	36.4	41	3,900	50
South Dakota	85.1	5	11	17	14.2	36	24.6	49	11.6	34	0.42	47	15.6	48	21.2	47	11,391	3
Tennessee	64.1	41	15	40	11.9	47	36.6	35	10.8	38	0.69	39	21.6	44	123.0	20	6,687	33
Texas	63.2	43	16	47	16.0	24	46.2	19	14.5	22	1.41	20	40.7	26	114.6	23	9,903	5
Utah	75.9	20	6	1	15.1	31	53.4	8	26.9	2	1.31	22	67.6	4	165.2	15	5,412	47
Vermont	83.4	7	10	14	19.5	8	32.5	41	11.6	33	1.63	16	54.9	9	75.8	28	7,666	21
Virginia	73.7	27	13	31	19.2	9	43.8	24	16.9	13	0.87	30	31.8	34	485.6	5	7,070	27
Washington	74.9	23	8	4	18.8	10	71.6	1	12.4	32	1.29	23	51.5	13	258.6	11	5,744	45
West Virginia	72.8	28	14	33	10.5	49	32.7	39	9.7	43	0.67	40	6.7	50	46.4	36	6,670	35
Wisconsin	84.0	6	10	14	17.9	14	43.0	25	16.8	14	1.68	15	55.6	8	37.8	40	7,065	28
Wyoming	74.3	24	7	2	17.2	17	35.2	37	14.6	20	0.83	32	36.8	29	29.6	44	7,721	18

Please refer to *Capacity Index Data Sources* and the *Capacity Index* text for further detail on individual measures.

RESOURCE CAPACITY

PHYSICAL INFRASTRUCTURE AND AMENITY RESOURCE CAPACITY

Loans To Equity		Comm. & Ind. Loans per 1,000 wkrs.		Venture Capital		Div/Int/Rent Inc. per capita		Highway Deficiency		Bridge Deficiency		Sewage Needs per capita		Housing Costs		Doctors per 1,000 pop.		Found. Grants per 1,000 pop.		Tour. Spend. per capita	
Ratio	Rank	$	Rank	Score	Rank	$	Rank	%	Rank	%	Rank	$	Rank	%	Rank	#	Rank	$	Rank	$	Rank
9.56	32	3,288	32	0.18	31	1,471	30	0.2	7	48	34	120	12	39.5	23	1.56	43	28	50	39	48
11.72	25	4,881	9	0.00	46	244	50	30.0	45	11	2	324	39	43.2	34	1.58	41	468	26	74	25
42.98	4	3,535	24	0.29	26	1,995	22	5.7	22	7	1	171	23	47.5	41	2.21	15	172	40	86	19
6.85	44	3,164	34	0.03	40	1,022	32	4.2	18	48	34	112	11	41.2	30	1.56	43	37	48	77	22
43.04	3	4,640	10	3.34	2	18,944	1	6.1	25	26	14	195	25	46.2	38	2.67	6	1,293	8	89	17
9.04	38	3,140	37	2.25	4	2,037	21	6.8	28	36	26	24	1	38.5	17	2.25	14	1,060	11	173	4
31.88	7	4,285	11	2.53	3	2,757	16	0.6	10	63	48	342	42	35.8	5	3.05	4	1,213	9	37	49
10.45	29	20,270	1	0.80	12	403	46	0.0	1	19	8	82	6	41.7	32	2.05	20	3,987	1	99	14
16.52	16	2,837	41	0.14	33	10,306	3	2.9	15	23	12	338	40	38.5	16	2.36	11	94	46	113	9
16.26	18	3,270	33	1.17	8	2,753	17	0.0	1	44	29	107	10	40.4	26	1.78	33	731	17	66	32
24.15	10	3,326	31	0.32	25	578	42	0.0	1	27	15	291	37	48.0	43	2.58	7	776	15	123	8
9.53	33	3,865	19	0.00	46	471	44	14.2	39	29	17	170	21	53.1	50	1.38	49	120	45	75	23
13.04	21	7,014	3	0.58	16	7,810	5	6.3	26	31	21	242	31	40.9	28	2.21	15	2,377	4	48	45
9.49	34	3,041	39	0.13	34	2,842	14	7.3	31	51	38	283	35	35.7	4	1.57	42	551	24	49	43
5.57	50	2,645	44	0.04	38	1,874	25	3.8	17	49	37	227	29	38.9	18	1.55	45	250	35	56	40
6.55	45	3,764	21	0.01	44	1,607	27	66.8	50	52	39	159	19	34.5	2	1.85	31	441	27	63	37
9.30	35	4,000	14	0.07	35	1,567	29	5.3	21	62	47	364	43	39.7	24	1.65	39	332	29	49	43
9.16	36	4,051	13	0.04	38	1,956	23	2.0	12	46	30	206	27	47.6	42	1.90	28	212	37	58	38
10.01	31	2,564	45	0.66	15	591	41	7.7	32	30	20	251	33	49.7	46	1.96	23	708	18	141	7
14.45	20	2,908	40	0.38	21	2,903	13	0.5	9	36	26	151	18	37.7	11	3.60	1	522	25	65	34
30.27	8	6,269	5	5.80	1	4,269	10	2.3	13	35	23	671	48	45.1	36	3.38	2	902	13	50	42
14.86	19	3,868	18	0.20	30	5,046	9	25.3	43	29	17	339	41	37.6	10	1.91	25	984	12	68	28
12.13	24	5,544	8	0.81	11	2,584	20	5.2	19	29	17	240	30	40.3	25	2.26	13	3,501	2	107	11
8.03	41	2,397	48	0.01	46	839	34	29.7	44	54	41	165	20	51.0	49	1.35	50	142	42	48	45
10.06	30	3,374	29	0.05	36	3,199	12	31.6	46	63	48	192	24	36.7	8	1.98	22	684	19	65	34
7.01	43	4,224	12	0.03	40	476	43	6.0	24	60	45	53	3	46.2	37	1.63	40	299	32	96	15
6.12	46	2,646	43	0.05	36	1,000	33	8.9	35	59	44	81	5	35.1	3	1.76	35	776	15	68	28
8.49	40	2,480	47	0.15	32	606	38	9.6	36	16	4	140	14	48.2	44	1.74	37	196	39	2,960	1
10.61	27	2,520	46	1.19	7	674	37	0.0	1	46	30	813	50	43.0	33	2.06	19	225	36	163	6
17.61	13	3,851	20	1.59	6	6,301	7	8.1	33	35	23	464	45	38.4	15	2.44	9	874	14	313	2
7.92	42	3,427	27	0.29	26	679	36	34.8	48	18	6	94	8	50.3	48	1.91	25	274	33	112	10
75.45	1	11,109	2	0.93	9	13,329	2	5.2	19	67	50	688	49	37.7	13	3.23	3	2,891	3	51	41
27.10	9	3,709	22	0.35	22	2,665	19	2.4	14	57	43	170	22	37.9	14	1.87	30	635	20	83	21
5.82	48	3,400	28	0.00	46	424	45	0.0	1	53	40	25	2	39.5	22	1.75	36	133	44	64	36
17.42	14	3,515	25	0.22	29	5,845	8	11.7	38	21	9	304	38	34.2	1	2.03	21	560	23	48	45
8.89	39	3,934	17	0.03	40	1,728	26	19.0	41	56	42	103	9	43.3	35	1.55	45	633	21	87	18
36.74	5	3,993	15	1.98	5	1,607	28	33.1	47	18	6	288	36	41.3	31	2.20	17	1,107	10	86	19
17.42	15	6,084	6	0.35	22	7,089	6	16.5	40	36	26	137	13	38.9	19	2.37	10	2,212	5	66	32
48.26	2	5,970	7	0.49	19	593	40	37.2	49	22	11	398	44	41.0	29	2.54	8	1,705	6	34	50
20.13	11	1,970	50	0.41	20	1,238	31	3.7	16	21	9	147	16	40.7	27	1.67	38	162	41	91	16
11.20	26	3,952	16	0.03	40	386	47	0.0	1	48	34	85	7	39.4	21	1.54	47	64	47	73	26
12.40	23	3,131	38	0.79	13	1,955	24	7.1	30	46	30	199	26	39.0	20	1.93	24	304	31	75	23
12.58	22	6,411	4	0.87	10	8,860	4	8.6	34	35	23	146	15	36.8	9	1.81	32	1,378	7	71	27
16.35	17	2,803	42	0.56	17	602	39	5.9	23	15	3	216	28	48.7	45	1.88	29	137	43	107	11
10.54	28	3,665	23	0.53	18	311	48	10.3	37	17	5	275	34	49.8	47	2.72	5	256	34	251	3
20.03	12	3,146	36	0.35	22	3,477	11	6.8	28	33	22	148	17	37.7	12	2.20	17	327	30	68	28
34.51	6	3,491	26	0.69	14	2,753	18	0.6	10	27	15	470	46	36.7	7	2.31	12	582	22	67	31
5.65	49	2,322	49	0.00	46	743	35	6.7	27	60	45	479	47	46.4	39	1.78	33	37	49	57	39
9.04	37	3,154	35	0.29	26	2,825	15	23.5	42	46	30	249	32	36.4	6	1.91	25	333	28	106	13
5.91	47	3,341	30	0.00	46	275	49	0.2	7	25	13	65	4	47.0	40	1.48	48	210	38	167	5

Capacity Data Sources

Subindex One: Human Resource Capacity

High School Graduation

Percent of high school entrants graduating, 1986. Adjusted for migration and unclassified students.
Source: State Policy Research Inc., "Table G-26" *State Policy Data Book '87* (Alexandria, VA: State Policy Research, Inc., 1987).

Adult Illiteracy

Percent of adults age 18-64 considered "illiterate," 1985.
Source: U.S. Department of Education estimates based on the "English Language Proficiency Survey," 1985, reported in Jack Brizius and Susan Foster, "Adult Literacy," *State Policy Reports*, November 9, 1987.

College Education Attainment

Percent of population over 25 with at least four years of college, 1980.
Source: U.S. Department of Education, Center for Education Statistics, Office of Educational Research and Improvement, *Digest of Education Statistics, 1985-1987* (Washington, D.C.: Government Printing Office, 1987).

Subindex Two: Technological Resource Capacity

Scientists and Engineers in the Workforce

Scientists and engineers per 1,000 workers, 1986.
Source: National Science Foundation, Division of Science Resource Studies, "U.S. Scientists and Engineers," 1987.

Science and Engineering Doctoral Students

Students in science and engineering doctoral programs, per 1,000 population, 1986.
Source: National Science Foundation, Division of Science Resource Studies, "Early Release of Summary Statistics on Academic Science/Engineering Resources," October 1987.

Patents Issued

Patents issued per 1,000 residents.
Source: U.S. Patent and Trademark Office, Office of Documentation, "Technology Assessment and Forecast Report: Patent Counts by Country/State and Year, 1/1963 - 12/1986," April 1987.

University Research and Development

Research and development expenditures at doctorate granting institutions, 1986. Dollars per capita.
Source: National Science Foundation, Division of Science Resource Studies, "Early Release of Summary Statistics on Academic Science/Engineering Resources," October 1987.

Federal Research and Development

Federal obligations for research and development, 1985. Dollars per capita.
Source: National Science Foundation, Division of Science Resource Studies, "Federal Funds for Research and Development, Fixed Years 1986, 1987 and 1988," 1987.

Subindex Three: Financial Resource Capacity

Bank Deposits

Commercial bank deposits, domestic activities, per 1,000 residents, 1986. Dollars.
Source: Federal Deposit Insurance Corporation, Division of Research, unreleased data, 1988. Calculations by The Corporation for Enterprise Development.

Loans to Equity

Total loans and leases as a percent of total equity, commercial banks, domestic activities, 1986. Ratio.
Source: Federal Deposit Insurance Corporation, Division of Research, unreleased data, 1988. Calculations by The Corporation for Enterprise Development.

Commercial and Industrial Loans

Commercial and industrial loans per 1,000 production workers on non-agricultural payrolls, 1986. Dollars.
Source: Federal Deposit Insurance Corporation, Division of Research, unreleased data, 1988. *Employment and Earnings*, May 1987. Calculations by The Corporation for Enterprise Development.

Venture Capital Investments

Venture capital funds' investments in the state, per capita, 1986. Dollars.
Source: Venture Economics, Inc., "1986 State by State Venture Capital Investments," Wellesley Hills, MA, 1987.

Dividend, Interest and Rent Income

Dividend, interest and rent income per capita, 1986. Dollars.
Source: *Survey of Current Business*, August 1987. Calculations by The Corporation for Enterprise Development.

Subindex Four: Physical Infrastructure and Amenity Resource Capacity

Highway Condition

Deficient interstate mileage, 1985. Percent.
Source: Federal Highway Administration, *State of the Nation's Highways: Report to the Congress*, June 1987.

Bridge Condition

Deficient number of bridges, 1986. Percent.
Source: Federal Highway Administration, *Eighth Annual Report to Congress: Highway Bridge Replacement and Rehabilitation Program*, 1987.

Sewage Treatment Needs

Estimated backlog of sewage treatment plant unmet needs, per capita, 1986. Dollars. *Source:* Environmental Protection Agency, *Assessment of Needed Publicly Owned Wastewater Treatment Facilities in the United States: 1986 Needs Survey Report to Congress*, September 1987.

Housing Cost

Weighed annual average fair market rent schedules, standard two-bedroom unit of housing, metropolitan areas (1988) as a percent of per capita income (1986). *Source:* Department of Housing and Urban Development, "Fair Market Schedules for Use in the Existing Housing Certificate Program," *Federal Register*, August 28, 1987. State Policy Research, Inc., "Table B-1," *State Policy Data Book '87* (Alexandria, VA: State Policy Research, Inc., 1987). Calculations by The Corporation for Enterprise Development.

Doctor Availability

Active physicians, federal and non-federal, per 1,000 residents, 1985. *Source:* American Medical Association, *Physicians Characteristics and Distribution* (Chicago: American Medical Association, 1985).

Foundation Grant Funds Distribution

State distribution of grants received, per 1,000 residents, 1985. Dollars. *Source:* The Foundation Center, *Grants for Arts and Cultural Programs 1986* (Washington, D.C.: The Foundation Center, 1987).

Tourism Spending

U.S. domestic travel-generated entertainment and recreation receipts per capita, 1985. Dollars. *Source:* U.S. Travel Data Center, *Impact of Travel on State Economies, 1985* (Washington, D.C.: U.S. Travel Data Center, June 1987).

All per capita population calculations were made by The Corporation for Enterprise Development. Source: 1986 population, Bureau of the Census, Press Release December 31, 1986.

Endnotes

1. Among the many newspapers and magazines highlighting America's lagging investments in the basic building blocks, see Laura Tyson, "The Real Supply Side Challenge," *California Business*, December 1987.

2. See Edward Malecki; "Technology and Regional Development: A Survey," *International Regional Science Review* 8 (1983); and Edward F. Denison, *Trends in American Economic Growth, 1929-1982* (Washington, D.C.: The Brookings Institution, 1985).

3. William Johnston, *Workforce 1000: Work and Workers for the 21st Century* (Indianapolis: Hudson Institute, June 1987).

4. U.S. Congress, Joint Economic Committee, *Location of High Tech Firms and Regional Economic Development* (Washington, D.C.: Government Printing Office, June 1982).

5. Edward Malecki, "Public and Private Sector Interrelationships, Technology Change, and Regional Development," Papers of the Regional Science Association, 47, 1981.

6. U.S. Congress, Office of Technology Assessment, *Technology Innovation and Regional Economic Development* (Washington, D.C.: Government Printing Office, July 1984); and U.S. Congress, Congressional Budget Office, "The Productivity Problem: Alternatives for Action," A CBO Study, January 1981.

7. Private research spending, though a critical measure, is often proprietary and therefore unavailable.

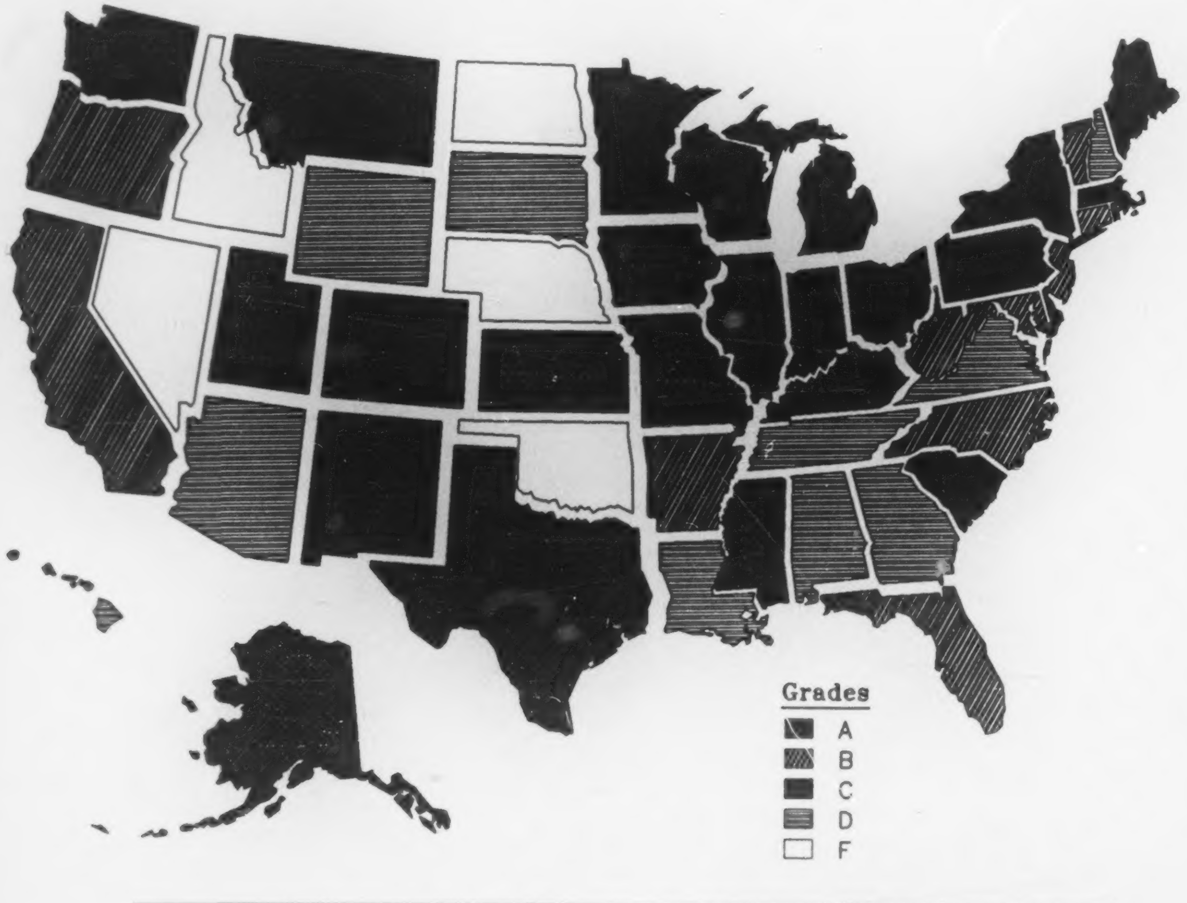
8. Mt. Auburn Associates, *The Design and Management of State and Local Revolving Loan Funds* (Somerville, MA: Mt. Auburn Associates, 1987).

9. See, for example, Roger W. Schmenner, *Making Business Location Decisions* (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1982); Michael Kieschnick, *Taxes and Growth: Business Incentives and Economic Development* (Washington, D.C.: Council of State Planning Agencies, 1981); Takeshi Nakabayashi, "A Survey on Location Decisions of Japanese Companies in the U.S.," unpublished paper for Mt. Auburn Associates and The Corporation for Enterprise Development, March 1987.

10. See Pat Choate and Susan Walter, *America in Ruins* (Washington, D.C.: Council of State Planning Agencies, 1981).

11. See Randall W. Eberts, "Estimating the Contribution of Urban Public Infrastructure to Regional Growth," Working Paper 8610, Federal Reserve Bank of Cleveland, December 1986.

4 The Policy Index


Grades
A
B
C
D
F

Policy Report Card

	Governance Subindex		Tax & Fiscal Policy Subindex		Education Policy Subindex		Infra./Amenities Investment Subindex		Mobilizing Capital Subindex		Enterprise/Business Subindex		Disadv. Indivs./Communities Subindex		FINAL GRADE	
	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade
Alabama	26	C	40	D	45	D	40	D	34	C	18	B	35	C	44	D
Alaska	26	C	29	C	23	C	16	B	27	C	50	F	25	C	34	C
Arizona	26	C	12	B	39	D	39	D	44	D	39	D	13	B	38	D
Arkansas	1	A	44	D	4	A	36	D	15	B	7	A	28	C	15	B
California	1	A	1	A	37	D	2	A	8	A	27	C	4	A	11	B
Colorado	1	A	16	B	47	F	31	C	27	C	7	A	31	C	26	C
Connecticut	26	C	33	C	8	A	17	B	8	A	18	B	6	A	12	B
Delaware	26	C	14	B	10	A	11	B	34	C	45	D	34	C	31	C
Florida	26	C	30	C	2	A	9	A	34	C	27	C	16	B	18	B
Georgia	26	C	24	C	25	C	47	F	34	C	36	D	49	F	45	D
Hawaii	26	C	28	C	42	D	27	C	34	C	27	C	41	D	39	D
Idaho	26	C	18	B	50	F	50	F	44	D	46	F	20	B	46	F
Illinois	1	A	46	F	49	F	10	A	8	A	7	A	44	D	28	C
Indiana	1	A	9	A	20	B	28	C	2	A	7	A	23	C	9	A
Iowa	1	A	22	C	42	D	34	C	4	A	7	A	38	D	21	C
Kansas	1	A	38	D	34	C	30	C	25	C	7	A	15	B	23	C
Kentucky	1	A	25	C	10	A	32	C	44	D	39	D	33	C	33	C
Louisiana	47	F	21	C	29	C	26	C	27	C	36	D	50	F	42	D
Maine	1	A	5	A	3	A	8	A	8	A	27	C	18	B	7	A
Maryland	26	C	4	A	17	B	1	A	19	B	18	B	31	C	12	B
Massachusetts	26	C	6	A	17	B	3	A	4	A	6	A	1	A	5	A
Michigan	1	A	15	B	26	C	6	A	1	A	1	A	7	A	1	A
Minnesota	1	A	2	A	31	C	13	B	19	B	7	A	5	A	8	A
Mississippi	1	A	23	C	37	D	49	F	15	B	18	B	36	D	32	C
Missouri	1	A	32	C	29	C	28	C	4	A	7	A	48	F	22	C
Montana	1	A	48	F	20	B	22	C	25	C	18	B	19	B	24	C
Nebraska	26	C	37	D	45	D	46	F	44	D	26	C	42	D	49	F
Nevada	47	F	42	D	48	F	41	D	27	C	49	F	47	F	50	F
New Hampshire	47	F	50	F	39	D	22	C	19	B	46	F	9	A	41	D
New Jersey	26	C	47	F	5	A	3	A	19	B	4	A	36	D	17	B
New Mexico	26	C	7	A	7	A	24	C	34	C	18	B	45	D	27	C
New York	1	A	10	A	15	B	3	A	3	A	7	A	23	C	4	A
North Carolina	1	A	26	C	10	A	36	D	34	C	7	A	30	C	18	B
North Dakota	47	F	41	D	28	C	43	D	27	C	39	D	38	D	47	F
Ohio	1	A	11	B	35	C	7	A	8	A	1	A	3	A	6	A
Oklahoma	26	C	45	D	44	D	33	C	49	F	39	D	28	C	48	F
Oregon	1	A	34	C	41	D	15	B	15	B	7	A	9	A	14	B
Pennsylvania	1	A	19	B	6	A	14	B	8	A	1	A	9	A	3	A
Rhode Island	26	C	17	B	24	C	19	B	19	B	39	D	27	C	30	C
South Carolina	1	A	8	A	1	A	42	D	4	A	18	B	20	B	10	A
South Dakota	1	A	49	F	14	B	48	F	27	C	27	C	40	D	37	D
Tennessee	26	C	43	D	32	C	24	C	44	D	46	F	22	C	43	D
Texas	26	C	31	C	10	A	43	D	34	C	27	C	26	C	35	C
Utah	1	A	20	B	33	C	38	D	34	C	27	C	12	B	28	C
Vermont	26	C	35	C	16	B	18	B	8	A	27	C	16	B	20	B
Virginia	1	A	39	D	17	B	35	C	49	F	18	B	43	D	36	D
Washington	1	A	27	C	36	D	12	B	33	C	36	D	8	A	25	C
West Virginia	1	A	13	B	27	C	20	B	34	C	27	C	14	B	16	B
Wisconsin	1	A	9	A	9	A	21	C	19	B	4	A	1	A	2	A
Wyoming	26	C	36	D	22	C	45	D	15	B	39	D	46	F	40	D

4

POLICY

There is no finish line in the race for the economic future. Like the horizon, the goal advances ahead of us even as we approach it. It's probably just as well: our economy is changing so quickly these days that it is hard enough just ensuring that you are on the right track. "Competitiveness," therefore, is determined not by whether one wins or loses, but by how well one plays the game. And while resources are limited, each state has the power to improve its competitive position in the race.

That's exactly what many of them are doing. One by one, states are focusing on creating economic environments that encourage the birth of new businesses and the expansion of existing businesses within their own borders, while downplaying the old zero-sum game of "smokestack chasing."[1] If these initiatives are attractive to businesses elsewhere, all the better.

This new focus demonstrates a much clearer understanding by state officials about the role public actors play in our private marketplace economy. It used to be said that: "The government which governs best, governs least." Today, as it becomes clearer that there is a direct relationship between public investments in capacity-building and the vitality of private industry, a more appropriate perspective is that: "The government which governs best, governs thoughtfully."[2]

"Governing thoughtfully" means, among other things, understanding how our economy works. We live in a private market economy, and there are some things that, by definition, a private market economy can't do — like providing for basic education or certain kinds of basic research. These are public responsibilities. There are other things that a private market economy does imperfectly — like protecting clean air and water, providing enough capital to certain types of enterprises, and assuring investments for things that have very long-term payoffs, like infrastructure. These too are public responsibilities. That's why we have government: to equalize the distribution of the benefits (and costs) of the economic pie in some cases, and to expand the pie in others.

As the pace of economic change has quickened and the challenge of economic development has become more complex, businesses and state governments have found that they need each other more than they once thought. A recent study by the Federal Reserve Bank of Chicago, for example, found that private profit rates are strongly affected by public capital investments. Indeed, the study estimated that an additional 10 percent increase in public capital investment in 1984 would have pushed private rates of return up 27 percent from 9.9 percent to 12.6 percent.[3] In a world of global economic competition, accelerating product cycles, rapid spread of technologies and expansionist foreign industrial strategies, success often can be achieved *only* through joint action.

Given these new realities, states recently have created a remarkable array of economic development policy innovations, often with the direct participation of businesses. They have created university and business R&D partnerships, established new business incubators, chartered public venture capital funds, streamlined tax and regulatory programs and provided comprehensive international trade assistance services, among other things. And, having recognized that a skilled workforce is the key to competitiveness, they have upgraded investments in public elementary, secondary and higher education, as well as in a wide range of adult skill enhancement initiatives, from basic literacy to problem-solving, dependability and other personal skills. Finally, they have acted to bring those left behind by changes in our economy back into the mainstream through a variety of programs ranging from business development in distressed communities to self-employment programs for the disadvantaged.

These emerging policies and programs are linked by common themes:

- They are *market perfecting*, recognizing both the power and effectiveness of private markets as well as their limitations, and are designed to remedy market imperfections that keep economic opportunities from expanding and becoming widely-shared.

- They are *investment-oriented*, assuring that resources are invested now so that the foundations of future growth are well established.

- They are *people-centered*, based on an awareness that the central dynamic in a changing economy is people with ideas about how to do something better.

- They are shaped by *public-private cooperation*, by leaders who recognize that we live in one economy, part private, part public.

- They *cross political lines*, and are being pursued equally by Republican and Democratic, liberal and conservative, state and local policymakers.

The Policy Index is designed to capture these innovations. They fall into two broad categories: *development preconditions* and *strategic development initiatives*. The first group includes those responsibilities of government that strengthen the basic foundation for economic activity: improving governance and regulation, creating an equitable and efficient tax code, investing in education and infrastructure and quality of life. The second group includes those cutting-edge strategies — many in partnership with private industry — that help states, and the businesses in them, compete in today's economy: mobilizing capital, promoting new enterprises and strengthening existing firms, and investing in disadvantaged individuals and communities.

The number and variety of these initiatives has risen sharply, even in just the last year. The decision to include individual state initiatives in any of these categories was guided by several key questions. Can the initiative have significant impact on the state's economy? Is the initiative targeted at an important barrier or opportunity for growth? Given the limits of state resources, and the need for partnerships with private actors, is the initiative likely to leverage significant private investment? Will it enhance the equitable distribution of economic opportunity? Does it empower communities and people to improve their own economic conditions? Is it politically pragmatic and administratively feasible?

In grading this year's Policy Index, we weighted each subindex equally. This is not to suggest that each subindex is equally important. The fact is we have no way of determining systematically either the differences across policy areas or the importance of a given initiative to individual states. Moreover, what is or is not important is partly a matter of judgment. What we measure here is *level* of effort, not necessarily *quality* or the *effect* of effort.

What's Different This Year

Significant changes have been made both to how the Index is structured and how information for it was collected. This year, we augmented research from secondary sources by conducting our own detailed survey of every state. We were gratified that all but a handful of states took the time not only to complete the survey, but to forward the documentationwe requested to verify their claims. As a consequence of this survey, we feel significantly more confident of the accuracy of the results in the Policy Index this year than last. Still, some states did not respond and others provided no documentation, so complete coverage has yet to be attained.

In the Index itself, the total number of variables has been increased, several subindexes were changed, some weak or dated measures have been dropped, and a number of new measures have been substituted or added, including several designed to provide a clearer picture of rural issues.

In the Improving Governance and Regulation subindex, we dropped the *Improving Government Foresight* measure because the indicator — whether states participated in the State Scanning Network — was too narrow and no better comprehensive alternative existed. We also dropped *Conducting Strategic Audits* because the source was old and had not changed. This year, we do not count the existence of a *Development Cabinet* because virtually every state now claims to have instituted one, and there is no objective way to assess how effectively they operate.

We developed an Investing In Education subindex this year from last year's Investing in Human Resources subindex. We moved two measures that were not education-related to another subindex. Then, we created the two composite measures *Support for Education* and *Reform of Education*, using some of the measures from last year's Human Resources subindex that were judged still current, several education-related measures that were in other Indexes last year, and several new measures added this year.

We also created a combined Infrastructure and Amenities Policy subindex this year that includes several new indicators, including *State Superfunds*, *Air Permit and Emissions Fees*, *Community Right-to-Know*, *Farmland Protection*, *Assuring Affordable Housing*, and *Access to Public Health Assistance*. Incorporated in this subindex from last year were *Public Capital Budgeting*, and *State Arts Agency Appropriations*.

In the Mobilizing Capital subindex, we gathered a number of separate measures into composites. Of the indicators in these composites, only a few changed from last year. We added *Investment Networks* and *Export Finance* to *Loan Guarantees* under a composite measure on *Improving Information and Reducing Risk*.

In a similar manner, we created a Promoting New Enterprises and Strengthening Existing Businesses subindex by incorporating several measures from last year's Technology and Business Development subindex, including *Research and Development Centers*, *Small Business Assistance Centers*, and *Small Business Incubators*. The *Labor-Management Assistance* measure and the *Employee Ownership and Assistance Programs* measures were moved from other subindexes. And we added several new measures, including *Research and Development Challenge Grants*, and *Export Assistance*.

In the Investing in Disadvantaged Individuals and Communities subindex, the *Transfer Payment Investment* measure was strengthened by the results of a new national survey. In addition, we dropped *Creating Minority Enterprises* and *DOL Project Participation* because the data we used last year were too fragmentary to be significant.

Finally, we added an Agricultural Development subindex incorporating an Agricultural Finance composite measure (composed of *Linked Deposit Loans*, *Direct Low Interest Loans*, and *Agricultural Industrial Development Bonds*) and a *Rural and Agricultural Diversification* composite. But, as noted later in this chapter, we did not include these data in the overall Policy Index calculations, because they would bias the results to the disadvantage of non-agricultural and already diversified agricultural states.

While these changes make comparisons with last year's results difficult, they substantially improve the Index as a whole.

Subindex One: Improving Governance and Regulation

If state governments are to be full partners in the development process, the quality of public sector analysis, decision-making and management must be as good as the private sector's.

As states wrestle with complex economic challenges from functional illiteracy to plant closings, from youth unemployment to the development of new international markets, governance that is more efficient, more farsighted and more strategic in approach becomes increasingly important. Indeed, better governance has been part of the success formula for many states that have recently shown impressive economic gains. Among the numerous steps states have taken to improve governance, this subindex examines two of the most important: streamlining the permitting process and increasing legislative oversight and audit capabilities. Other important steps include creating a process for collecting and analyzing economic information, designing effective public strategies, and coordinating multi-agency responses, but we have concluded that no consistent indicators exist to measure such state efforts.

Streamlined Permitting

State regulation is an economic fact of life. Regulations exist to protect the health, safety and welfare of a state's residents from flaws in the normal operation of the private market economy and from the occasional abuses by individuals operating in that economy.

Increasingly, and particularly as the overall quality of life in a state becomes a more and more important factor in business location decisions, businesspeople are concerned less about the *fact* of regulation than about the *administration* of it. Regulatory reform — not to be confused with regulatory "relief" — has become a significant factor in improving the environment for economic growth. States have undertaken regulatory reviews, established "one-stop" permitting offices, streamlined permitting applications and related paperwork, guaranteed decision timetables and even created ombudsman's offices to handle questions and complaints. The objectives of these reforms are to make clear the state's concerns and assure businesses a fair and timely process for reviewing their proposals, in the process cementing the relationship between the two key players in the development process. As a proxy for determining the extent to which regulations have been streamlined, we measure whether a "one-stop" business development permitting system has been installed.

Legislative Oversight and Audit

Perhaps the most positive effect of the responsibility shift for many economic policymaking responsibilities from the federal government to the states is the rapid increase in the professional analytic capabilities of state legislatures. We measure whether states have established a legislative audit function, by which legislative staff monitor the performance of agencies carrying out legislatively-mandated programs to assure that programs stay on track, are cost-effective and remain relevant. In general, states whose legislatures have developed such analytic staffs with defined audit responsibilities are more aware of how effective existing investments in economic development are and, as a consequence, more sensitive to how state actions affect the business community, and quicker off the starting blocks with new initiatives when a need is identified.

Subindex Two: Creating a Stable and Equitable Tax and Fiscal Environment

Recent research has shown that despite the tendency of state and local governments to use tax abatements and tax incentives to entice out-of-state businesses to relocate, taxation has relatively little effect on business location decisions. Other factors, such as proximity to markets or quality of life for employees are more important to employers and generally overwhelm whatever advantages may be created by tax differentials.[4] What's more, since more than three-quarters of all new jobs come from in-state businesses, such abatements and incentives simply increase the tax burden on the very businesses that have the most to do with a state's future. Still, this does not mean that tax and fiscal environment of the state does not affect the economic environment in the state.

In this subindex, we examine three key aspects of the issue: fiscal stability and balance (the use of an appropriate range of tax vehicles to establish a stable revenue base and support a consistent level of public investment); tax fairness (fair treatment of those who carry the tax burden); and fiscal equalization (ensuring that each community has relatively equal ability to deliver essential services).

Fiscal Stability and Balanced Revenue Sources

Although it is impossible to define what the "best" tax and fiscal environment would be for any state, there are several widely-recognized characteristics we *can* identify.[5] The first characteristic is that major taxes are balanced so that no individual tax is unduly burdensome and that all taxes, taken together, help insulate revenues from recession and economic shocks, to the extent possible. The second is that the tax system, when combined with a fiscal system in which prudent controls guard against wide swings in tax levels and the quality of services, permits the state to provide businesses the assurances they need to make long-term investments.

Tax Fairness

It is occasionally argued that an equitably distributed tax system is antithetical to a good business climate — especially to a state's ability to lure branch plants and other footloose facilities by using special tax breaks. But the credibility of state and local governments depends upon the conviction that citizens and businesses *already operating in the state* hold: that the taxes they pay are fair, that their tax dollars are being wisely invested and are generating needed public services, and that no one is benefiting at their expense. For businesses in particular, a fair tax system assures that "the playing field is level."

Fiscal Equalization

State policies to promote equal fiscal capacity among local governments are essential to a sound business climate. Such policies assure that all communities have an equal ability to provide an adequate level and quality of public services to firms and individuals. Furthermore, they reduce the potential for large property tax differentials between nearby communities to influence residential and firm location decisions. More importantly, equalizing state fiscal aid can alleviate financial stress and high tax burdens in urban areas where taxable wealth has dropped and public service needs have risen.

See *Appendix D* for a full discussion of the these tax and fiscal measures.

Subindex Three: Investing In Education

As the decade draws to a close and we begin to look toward the 1990s, perhaps the clearest lesson of the 1980s is the direct connection between the quality of our workforce and the health of our economy. In the wake of major studies criticizing the quality of our schools, states have rededicated their commitment to education as the keystone of their economic development strategies.[6]

This year, we combine a range of education initiatives into two composite measures: *Support for Education* and *Reform of Education*.

Support for Education

This composite measures the financial commitment states make to education. It includes:

- *Pupil Spending, K-12:* direct spending per pupil at the elementary and secondary level, adjusted for differences in personal income and the cost of living among states.

- *Pupil Spending, Higher Education:* direct spending at the post-secondary level at public colleges and universities, adjusted for differences in personal income and the cost of living among states.

- *Pupil/Teacher Ratio*

- *Changes in Teacher Salary:* the average change in elementary and secondary teachers' salaries, as a rough indicator of commitment to quality in education.

We note that while this composite permits a direct comparison among states, it does not indicate how effectively these investments are being used.

Reform of Education

To address how *well* we educate tomorrow's workforce, not simply how much we spend on them, this composite measure examines:

- *High School Science and Math Graduation Requirements*

- *Computer Literacy:* computer-related high school graduation requirements.

- *Remedial and Compensatory Programs:* state commitment to remedial and compensatory education.

- *Teacher Mentors:* teacher mentoring programs.

- *Teacher Incentives:* statewide incentive programs for recruiting and retaining teachers.

These initiatives, while not a comprehensive list, reflect the general areas where improvements are taking place and are among the few that can be measured across all states.

Subindex Four: Investing in Infrastructure and Amenities

The concept of "amenities" has taken on a decidedly economic meaning as the structure of our economy has changed. In more and more companies, employees are the most valuable resource, and attracting and retaining them can be key to a business's long-term success. Consequently, business and economic development officials have taken a new and much broader interest in what determines the amenity level in a state.

To begin to measure the extent to which each state is working to address this concern as well as related public infrastructure issues, we examine: whether adequate public capital budgeting practices exist through which major infrastructure improvements are built and maintained, whether the state is taking steps to safeguard the environment, whether it is acting to protect valuable farmland, whether it has state-financed programs to make housing more affordable to all, whether access to public health assistance is assured, and the extent to which cultural enrichment is supported through state arts agencies.

Public Capital Budgeting

While the existence of formal capital budgeting practices does not insure against the age-old habit of cutting repair and maintenance investments every time there is a budget crunch, it does suggest a degree of seriousness about the challenge of maintaining the roads, bridges, water and wastewater systems, solid waste sites, dams and prisons that form a part of the quality of life picture. In this composite measure, we examine:

- *Facility Inventory:* whether states maintain a central unified inventory of public facilities.

- *Needs Assessments:* whether states provide regular assessments of facility conditions and investment needs.

- *Capital Plans:* whether states develop long-range capital plans to guide annual capital budget requests.

Environmental Policy

As a first step toward developing a comprehensive environmental policy measure, we developed a composite incorporating three indicators:

- *Community "Right-to-Know":* A first step in assuring a safe and healthy environment is knowing the extent to which harmful materials exist in it. This measure identifies states that have passed legislation that guarantees workers and residents the right to know the identity and potential dangers of hazardous materials used or stored in their workplace or community.

- *State Superfunds:* In a related matter, some states have created their own "Superfunds" to identify and clean up old hazardous and toxic waste dumps. We measure not just whether such enacting legislation has been passed, but whether it has been funded.

- *Air Permit and Emissions Fees:* To strengthen their air pollution control programs and augment inadequate public abatement funds, several states have expanded their permitting programs to establish emissions fees. We count only those states which have both enacted such programs *and* collected fees.

Farmland Protection

In much of our country, towns were first founded in areas where the farmland was the best. Where those towns have prospered and become cities, their original main asset — prime farmland — is under heavy urban and suburban development pressure. The problem is important both because we need to assure a sustainable supply of reasonably-priced food and because farmland has important open space value — a respite from concrete, steel and glass. One of several new rural economic measures in the year's *Report Card*, this measure is a composite of the extent to which states have enacted any of several farmland protection initiatives:

- *Right-to-Farm Laws:* laws that protect farmers and ranchers from certain legal actions against normally accepted farm practices.

- *Development Rights — Purchase:* states that may purchase the development rights of farmland by paying the owner the difference between the market value and farm-use value of the land.

- *Development Rights — Transfer:* rights that allow qualifying developers to increase development density in designated receiving areas, if they purchase development rights from farmers whose property is in other designated sending areas to protect their use of land for farming and keep them from being forced off their land.

- *Agriculture District Ordinances:* allow farmers to organize land into legally recognized geographic areas restricted to agricultural use.

Preferential/differential taxation is not included here because it now exists in all states.

Assuring Affordable Housing

Any businessperson who has tried to recruit a new employee knows that the availability of affordable housing is a pivotal quality of life issue. Any public official who has tried to find shelter for a disadvantaged family has learned the same lesson. The cost of housing is driven, in part, by how "hot" the economy is in a given area. But access to housing can also be influenced by public policy in several ways. This composite measure examines whether states have taken such actions — actions that go beyond the more conventional step of offering federally-subsidized mortgage revenue bonds.

- *Housing Construction:* by providing financial assistance for construction.

- *Housing Rehabilitation:* by providing financial assistance for rehabilitation.

- *Tenant Support:* by financially assisting tenants.

- *Home Ownership:* by providing assistance to make home ownership more affordable.

- *Pre-Development Costs:* by absorbing the pre-development costs of planning and building low- and moderate-income housing.

- *Housing Trust Funds:* by establishing a trust fund to finance the construction of affordable housing.

Access to Public Health Assistance

An essential indicator of quality of life for the more than one-quarter of America's non-elderly population without private health coverage is whether public health care is available and sufficient to meet basic needs. Using the results of a recent nationwide analysis, this measure examines state Medicaid eligibility standards, service coverage, service availability, quality and reimbursement methods.

State Arts Agency Appropriations

A state's commitment to cultural enrichment — its appropriations for arts agencies and organizations — can have a significant effect on whether its residents feel "this is a nice place to live" and whether its businesspeople feel "this is a good place to build a business." Pride of place is reflected in public art, architectural preservation, downtown revitalization, support for state and community symphony, ballet, and related arts organizations, among others things, and is transmitted well beyond state boundaries. Obviously, only a small proportion of the funds for such activities comes from state government, but states can set an example for the rest of the community — and many do.

Subindex Five: Mobilizing Capital

Financial capital is the "grease" that keeps economic machinery turning smoothly. When capital does not flow to its most productive uses, for whatever reason, the machinery slows. Jobs are not created, new technologies are not developed and commercialized, the higher economic returns delivered by new or expanding enterprises do not occur, and the economic health of the state suffers.

Existing financial institutions — commercial banks, insurance companies, venture capital firms, investment banks and others — do a pretty good job of assuring the availability of capital for large, established corporations. But research indicates that these institutions often fail to provide appropriate kinds and amounts of capital to the very enterprises that create the majority of new jobs and economic energy in today's economy: new and young businesses, rapidly expanding businesses, businesses in new economic sectors, businesses located in depressed communities, minority- and women-owned businesses and businesses with nontraditional management structures — cooperatives, worker-owned firms, non-profits, and community development corporations.[7]

The reasons capital is often unavailable for such enterprises are many. An aversion to risk — even when the expected return may be high — renders some capital sources unavailable. The difficulty and cost of acquiring information on new, young or small firms discourages such investments. The cost of putting together deals is about the same regardless of a business's size; thus it costs less to put together one or two big deals than many smaller ones. Political, geographic, racial and sex biases still exist. And regulatory and taxation policies — such as "legal list" limitations, barriers to risk pooling, usury ceilings, and the like — may simply prohibit existing institutions from making capital available to some enterprises, regardless of their soundness or future prospects.

But sheer availability is not the only problem. The kinds of capital — long-term debt, short-term debt, subordinated debt, equity, near-equity and others — are also often inadequate. A firm needs different kinds of capital at each stage of its life: research, product development, start-up, expansion, and so forth. If capital is generally available, but not in the right form, it might just as well not be available at all.

To overcome limitations on economic development caused by capital market failures, state governments have developed a variety of financial innovations. This subindex gathers these innovations into three categories: changing state financial regulations to redirect the investments of private institutions, creating new public or publicly-chartered institutions to fill gaps in the private financial marketplace, and developing new business services that increase information or reduce risk.

Reforming Finance Regulations

Four of the five trillion dollars in the U.S. economy are controlled by financial institutions that are licensed and regulated by government — banks, savings and loans, and insurance companies, among others. Any policy which makes even a small change in the investment practices of such institutions will have a dramatic effect on the availability of capital to businesses in that economy. In this category, we examine three initiatives: intrastate branch banking, pension fund investments and state community reinvestment acts.

- *Intrastate Branch Banking:* Regulations that prevent the entry of new banks into communities can limit competition and the kind of aggressive lending practices that competition stimulates. Many states have begun to lift both intrastate and interstate banking restrictions in order to address this problem. We examine here only statewide branch banking.

- *Pension Fund Investment:* State pension funds are often legally restricted from investing in the very communities where the people who contribute to and benefit from the fund live. In some cases, statutory lists specify where funds can be invested. To free some of these resources for local investment, many states have eliminated the lists altogether, substituting the "prudent investor" language of the federal Employee Retirement Income Security Act, which governs private pension fund investment practices. Under this language, some fund assets can be invested in qualifying in-state businesses, while still protecting the integrity of the fund. Other states have modified their lists to include some investments in in-state corporate equities, small businesses, SBA loans, limited partnerships with venture capitalists, and in affordable housing. This measure indicates whether in-state public pension funds are investing in venture capital or investing as venture capital.

- *Community Reinvestment Act:* Finally, some states have enacted their own versions of the federal Community Reinvestment Act of 1977, to require banks to demonstrate that they have taken steps to meet the credit needs of the businesses in the communities in which they are chartered. We identify which states make such requirements.

Creating New Institutions

When all else fails, some states have created public or publicly-chartered private institutions to channel capital to businesses or communities that private financial institutions either cannot or will not serve. Some of these institutions are capitalized by state appropriations, some by private investors who may be offered some special incentive (like a tax cut or credit), and some by leveraging both federal and private funds. The best of these institutions have: supplemented rather than substituted for private markets, targeting their limited funds to clearly-identified market gaps; increased the access to capital for businesses, rather than subsidizing its cost; provided the kind of capital (e.g., equity, long-term debt) to new, young, or small businesses that private institutions have been unable to provide; leveraged a great deal of private or federal money with a very small amount of state money; and demonstrated the economic viability of enterprises that private markets had judged too risky, eventually shifting these businesses to private institutions when their credit-worthiness was proven. In this category we examine the four principal institutions currently in use.

- *Quasi-Public Venture Capital Funds:* These are publicly-chartered and capitalized corporations, but accountable to their founding statute and their own board of directors. Most public venture capital corporations fit this definition.

- *Business Development Corporations:* BDCs are statewide, publicly-chartered, privately-managed corporations, usually capitalized by commercial banks, savings banks or insurance companies, which advance loans to riskier ventures.

- *Loan Funds:* Usually financed largely through tax revenues and run by government agencies, these are debt intermediaries designed to meet a specific development need.

- *Business and Industrial Development Corporations*: BIDCOs are state-regulated and -chartered, privately managed institutions designed to meet small firms' needs for moderate- to high-risk debt and equity capital. They differ from BDCs principally in that more than one can be chartered to operate in a state.

Improving Information and Reducing Risk

To overcome imperfections in private markets that keep capital from reaching new, young or small businesses that the state considers important to long-term development, states have undertaken to gather and distribute financial data on these businesses and, to reduce the perceived risk, guarantee private investments in them. We examine the three principal initiatives in use.

- *Loan Guarantees:* When their economic development objectives are frustrated by risk-aversion in private financial markets, states have established loan guarantees, credit insurance, and secondary markets to reduce the exposure of private investors to loss. This measure examines nonagricultural loan guarantees.

- *Investment Networks:* Besides the venture capital industry, there is a large but informal supply of private investors interested in providing equity seed capital to early-stage or higher-than-average-risk enterprises. A number of states now have created computerized networks to match such investors with business investment opportunities.

- *Export Financing:* In a number of states, conventional financial institutions do not offer the full range of services needed by businesses that seek export sales. This measure identifies states that have created programs to help repackage federal resources or assure direct financing through guarantees or interest subsidies.

Subindex Six: Promoting New Enterprises and Strengthening Existing Businesses

State development officials have recognized the importance of technological innovation, entrepreneurship and effective business management to the future growth of their economies and have taken a variety of steps to create the right conditions for new businesses to be born and existing businesses to grow. These efforts have been strongest where states have taken the time to identify their own competitive advantages and establish programs to strengthen and capitalize on them. In all, we look at eight such initiatives.

Research and Development Challenge Grants

A number of states have become financial partners with fledgling entrepreneurs and struggling inventors by providing research and development funds on a matching basis for promising projects. We identify which states have created such funds.

Research and Development Centers

The link between first-class university research and the creation of "cutting edge" businesses has become clear to many states.[8] They have established or helped finance the creation of advanced technology centers — like Pennsylvania's Ben Franklin Partnership or Ohio's Thomas Alva Edison Program — to foster new technologies and generate spin-off businesses. Often the funds appropriated to build such centers, support research, endow faculty chairs or support graduate student fellowships require matching private sector investments.

Small Business Assistance Centers

For would-be entrepreneurs and for small businesses that want to expand, frequently the biggest stumbling block is simply not knowing where to start. To remedy this problem many states have established small business assistance centers and business extension services to provide business creation and management assistance. As evidence continues to grow that most of the new jobs in a state's economy will be created by businesses and entrepreneurs already living in the state, the value and importance of these programs will grow as well.

Small Business Incubators

The idea behind incubator facilities is that the likelihood of success for new businesses can be increased by helping them overcome common barriers: under-developed management skills; lack of a business support network; a shortage of accessible, appropriately sized, affordable industrial and commercial space; and the unavailability of risk capital. States may build, donate or underwrite the development of incubator facilities, absorb some operating costs, and even offer seed capital and other forms of start-up financing to businesses facing these barriers.

Technology Transfer

Several states have established new technology transfer programs designed to identify promising new university research and move it toward commercialization, solve technology-related problems of corporate clients, and help existing industries become more competitive through retooling.

Employee Ownership Assistance

Employee ownership and operation is an increasingly attractive tool for preserving jobs in viable businesses that face the threat of closing due to the owner's retirement, a distant parent corporation decision unrelated to the viability of the plant, or a similar circumstance. Besides saving jobs, employee ownership can actually improve productivity, provide workers with income beyond their wages, and enhance local control over future economic development. States have established employee ownership assistance programs to smooth the transition — through technical assistance, ownership and management training programs, loans and loan guarantees and tax incentives, among other features.

Labor-Management Assistance

Increasing labor productivity, overcoming skill shortages, increasing the flexibility and adaptability of worker skills, and strengthening the ability of managers to identify and fully utilize the talents of their employees are crucial to increasing the competitiveness of businesses *and* state economies. Several states have established programs to improve labor-management relationships at the local level. While the range of such programs is broad, the most direct and potentially most effective have been providing seed grants for local labor-management programs and councils, trouble-shooting and providing direct staff assistance, sponsoring conferences and seminars, and acting as a clearinghouse for information. This indicator identifies states which have established labor-management productivity and related quality of worklife programs at the local level.

Export Assistance

In yet another effort to exert greater control over their own economic futures, states have begun to develop sophisticated export marketing programs that go well beyond traditional promotional activities, establishing their own trade offices, or conducting their own overseas advertising programs. They are conducting new activities, including the following:

- *Buyer/Seller Matching:* establishing systems for linking potential overseas product buyers with in-state sellers.

- *Publications:* publishing newsletters and handbooks with an international focus, to help in-state businesses work with foreign partners, or build international markets or ventures.

- *Counseling and Marketing Services:* identifying trade leads for products produced in-state, providing training and one-on-one counseling, among others.

- *Seminars:* holding seminars, conferences, and workshops on international trade opportunities and problems.

Subindex Seven: Investing in Disadvantaged Individuals and Communities

When it comes how the benefits of economic development are distributed, all communities and individuals are not created equal. We saw this phenomenon nationwide as rural economies continued to decline in the face of rapid economic expansion elsewhere in the nation. We see it often in urban neighborhoods abandoned by the businesses that once created them. And we see it in individuals who have been displaced by rapid economic change or who may never have participicted in the economy in the first place.

If the broad purpose of economic development is to provide everyone an opportunity for a better life, and if the attractiveness of a state for new development is determined, in large part, by how capable it is of providing that opportunity, then states that help disadvantaged individuals and communities adjust to and take advantage of changing economic realities are more vital and attractive for future growth than those that do not.

To identify how well states are meeting the needs of disadvantaged individuals and communities, we examine four indicators: the extent to which AFDC payments meet the basic support needs of those receiving them, whether transfer payment and social service programs have been restructured to go beyond maintenance to invest in economic independence, whether community-based development programs to create new growth are being supported, and whether rapid response teams have been established to address the needs of communities threatened by plant closings.

AFDC Benefit Adequacy

Transfer payments — welfare, unemployment compensation, social security and Medicaid, for example — are typically viewed as drags on the economy. In fact, however, they often stabilize economies and individuals in distress by maintaining purchasing power, conserving human capital, maintaining basic living standards and — particularly in rapidly changing economies — reducing resistance to productive change.

The primary support program for the non-elderly poor in the nation, Aid To Families With Dependent Children (AFDC) is jointly administered by federal and state government. Benefit levels are determined by the state and offer an indication of the state's willingness to ensure a decent standard of living for its least advantaged citizens. To gauge the adequacy of benefits fairly from state to state, we measure AFDC benefits as a percent of per capita income.

Transfer Payment Investment

Beyond stabilizing incomes and economies, transfer payments can be even more effective contributors to economic development if they are used to encourage and support training, education, reemployment and self-employment.

States that develop transfer payment *investment* programs can begin to reduce the fiscal cost of dependency in a state economy, enlarge and improve the workforce, reduce social tension and create the spirit of enterprise and hope which is the backbone of a healthy economy.[9] In this composite measure we examine a variety of efforts to reform the basic welfare system so as to promote economic independence, including: assessing the comprehensiveness and stability of funding for welfare-to-work programs; the existence of state-funded initiatives beyond those mandated by federal law; state child care, medical, and transportation assistance to meet the needs of reemployed welfare clients; and state use of federal job training monies for AFDC recipients. (See *Appendix E* for a fuller explanation and reported data related to this *Transfer Payment Investment* measure.)

Community-Based Development

Community-based development organizations can play a key role in delivering a wide range of services critical to the revitalization of economically-distressed communities: loan packaging, fund-raising, development planning, providing technical assistance to new and small businesses, developing and managing incubator facilities, sponsoring real estate development projects, developing social service enterprises, and investing directly in small firms, among other activities. We measure here the extent to which states support such organizations through grants, loans, technical assistance and equity investments.

Rapid Response Teams

When a major plant is closing and employee ownership is not an option, communities face rapidly escalating social service demands in the face of a sharp drop in tax revenue from the closing plant. State-sponsored rapid response teams can lessen the toll on workers, their families, other businesses and the community as a whole. Many such teams, funded by the federal Job Training Partnership Act and other resources, develop strategies for providing coordinated assistance, inventory existing public and private financial sources and expertise, design new training, business retention, and social service programs, and evaluate the results. The ultimate objective of such teams is to smooth, to the extent possible, the inevitable bumps encountered by people and communities in economies undergoing rapid change. States that have programs in place are more capable of adjusting to these changes than those that do not, and thus are more attractive prospects for future economic development.

Subindex Eight: Agricultural Development

This year, we examined, but did not calculate into the Policy Index totals, two indicators of state commitment to broadly based agricultural development: agricultural diversification programs and special agricultural finance programs. We do not factor these measures into the nationwide totals because they have relevance only to major farm states — and even at that, primarily only to grain-growing states. Still, in these states the existence or absence of such programs is a clear indication of the degree to which state government is involved in solving these issues. Moreover, the results suggest that even states with quite similar agricultural economies approach their farm problems differently.

Agricultural Finance

The unique financing needs of agricultural enterprises, underscored by the recent farm credit crisis, have led many farm states to establish financing mechanisms targeted directly to farmers and farm-related businesses. As part of our effort this year to look at the needs of rural areas, we indicate whether states have established any of three such mechanisms.

- *Linked Deposit Loans:* In these programs states purchase certificates of deposits that pay below-market interest rates from banks that agree, in turn, to make loans to farmers (and in some cases farm-related enterprises) and charge below-market interest.

- *Direct Low Interest Loans:* Many farm states maintain loan programs from revolving or general funds to help finance beginning farmers, farmers' markets, cooperatives, soil and water conservation projects and debt restructuring.

- *Agricultural Industrial Development Bonds:* A number of states have sold "Aggie Bonds" to provide loans for land purchases by first-time farmers; to finance machinery, equipment, and building purchases; and for purchasing farm mortgages held by in-state bankers, among other uses.

Rural and Agricultural Diversification

Just as they have moved to diversify their manufacturing sectors, many states have also begun to diversify their agricultural sectors, in order to boost farm profits, spawn farm-related enterprises, stabilize rural community economies, and enhance rural competitiveness. Initiatives include creating new R&D centers, value-added processing programs, new product development programs, and marketing and management assistance.

Findings

This year the Policy Index covers a wider variety and larger number of state economic development initiatives. Nevertheless, as we noted last year, the pace of state policy innovation is rapid, state administrations change frequently and, in any given state, all of the policies in place today may not be reflected in this Index.

In a sense, however, perfect accuracy is unnecessary here. What we are trying to gauge is relative level of effort: is a state doing most of the things within its power to increase the competitiveness and attractiveness of its economy? Some of the things? Very few of them?

What if a state does all the things we list in the Policy Index — will it be successful? Will its economy boom? We make no such claim. Government is but one player in any economy, and not the most important one at that. Its resources are small and its role is limited. But the evidence is unequivocal that, however small, this role is also crucial:

State governments can, by their own actions, create the environment in which businesses can grow, economies can expand and opportunity can be widely shared. Just as clearly, by their inaction, states can render their economies lifeless and uncompetitive.

As expected, among the states earning honor grades of *A*'s or *B*'s in the Policy Index are many of the Northeast states that also lead the nation in economic performance — Connecticut, Maine, Massachusetts, Maryland, New Jersey and Vermont. These states have made a strong commitment to public investments and public-private partnerships that will strengthen their capacity to generate future growth and position them to remain leaders in the economic race for the future.

But perhaps the most interesting finding is that a number of industrial Midwest and New South states with troubled economies in recent years are also among the states earning *A*'s and *B*'s in the Policy Index. These states include Indiana, Michigan, Ohio, Arkansas, South Carolina and West Virginia. They symbolize that famous adage: "When the going gets tough, the tough get going."

More than anything else, the leaders in the Policy Index are the embodiment of the old rule: "Necessity is the mother of invention." Take the case of Massachusetts. A wholesale restructuring of its economy began in the late 1960s and early 1970s. Faced with deep economic distress, chronic unemployment and decaying factory towns, policymakers had little choice but to innovate. None of the old formulas were working: they couldn't keep factories from leaving and they couldn't lure replacements. They had to rebuild from within, strengthening their assets and converting their liabilities. It took the better part of a decade — a decade of investment, innovation and partnership-building. There is no "miracle" to the turn-around in Massachusetts, just hard work and leadership.

In the meantime, industrial Midwest states began to feel the strains of the restructuring of the American manufacturing economy. Faced with the same stark challenges and the same limited choices, these states have arrived at the same conclusion as Massachusetts: build from within, invest in yourself. Having learned from Massachusetts' successes and failures, these states have created an extraordinary array of imaginative new programs and partnerships, reshaping our image of what government can and cannot do in the process.

And the same theme is now being shared by a few Southern states struggling to overcome legacies of their own — chronic underinvestment, poverty and "smokestack chasing" economic development policies that no longer produce the results they once did. The South was where the factories of Massachusetts fled in the 1960s and 1970s, lured by cheap labor, tax abatements and other generous incentives. Then, when they found even cheaper labor sources overseas, these businesses abandoned the South as well. Today, after several years of investing in education, home-grown business development, infrastructure and capital markets, states like South Carolina and Arkansas are gaining ground fast. Unfortunately, too many of their neighbors have yet to see the light.

There is another pattern in the Policy Index findings as well: a number of states whose economies are booming have weak foundations and are doing poorly in the Policy Index. These states are "coasting." Their current success is largely due to "being in the right place at the right time" and their future prospects for powering their own growth do not seem bright. Most prominent examples of such coasting states are Rhode Island and New Hampshire.

Finally, as with last year, among the states with the farthest to go in economic development policy initiatives tend to be the thinly-populated Plains and Mountain states — including South Dakota, North Dakota, Idaho, Nebraska, and Wyoming. Heavily dependent upon energy and other commodity prices, these states have been content in the past to take whatever the cycles give them: to "boom" with the good times and go "bust" in the bad times. Joining these Plains and Mountain states at the bottom of the Policy Index are several Southern states slow to take charge of their own futures and aggressively work to build their economies — most notably, Alabama, Tennessee, Georgia, Louisiana and Oklahoma.

And in the end, that is the message of the Policy Index: that states can gain a measure of control over their own economic destinies. Resources may be limited, but imagination is not.

At the subindex level, there are several interesting stories underway. For example, it seems clear that the challenge of Improving Governance has been taken up by a majority of the states. Only a handful — New Hampshire, Nevada, North Dakota and Louisiana — have taken neither of the steps measured in this subindex.

Improvements in education stand out as first steps toward overall economic development policy reforms. More than half of the leaders in education reform are also leaders in broad-based policy innovation. The reverse is also true: states at the bottom of the Education subindex tend to be at the bottom of the entire Policy Index.

The Infrastructure and Amenity Policies subindex documents the next level of investments made by our policy leaders. Again, the leaders are familiar — Maryland, California, Massachusetts, New Jersey, New York, Michigan and Ohio, among others. The familiar trailing states are predominantly Southern and Western. A surprise near the bottom of this list is booming Georgia, casting a shadow over how long that state can sustain the growth its urban areas are currently experiencing.

The Mobilizing Capital subindex presents a somewhat surprising finding: New York and Massachusetts, for example, both with strong traditional capital markets, nevertheless found it necessary to fill capital market gaps through state action — underscoring the fact that it is not how *much* capital you have in a state but how *accessible* it is that matters in creating economic growth. This suggests that states with a reservoir of capital market knowledge and experience may engage more actively in capital policies than those states with a more acute need that lack such expertise.

In the New Enterprise Development subindex it is not the leaders, but those just behind them, that present the most interesting story. We are accustomed by now to seeing Michigan, Ohio, and Pennsylvania in the vanguard of enterprise development, building on the earlier accomplishments of Massachusetts. But there are newcomers to this list, including Arkansas, Iowa, and Kansas, among others — a kind of "third wave" of innovators worth watching in coming years. Somewhat dispiriting are those at the bottom of the list: the thinly-populated states that continue to depend on energy and other commodity industries, and another, smaller group of states which depend upon the economic energy of a neighbor to meet their needs.

Finally, the states leading the Investing in Disadvantaged Individuals and Communities subindex are, perhaps not surprisingly, states that have made a special effort to bring those left behind by economic change back into the mainstream: Massachusetts, Wisconsin, Ohio, California, Minnesota, Connecticut and Michigan, among others. Many are heavy industry states hard-hit by both structural change and the last recession whose displaced worker, plant closing, and employment problems have been particularly acute. At the other extreme of this subindex are states whose problems have tended to be both chronic and acute — Southern and Western states like Louisiana, Georgia, Missouri, Nevada, Wyoming and New Mexico.

Policy Data

	GOV. & REG. IMPROVMT.		CREATING A STABLE AND EQUITABLE TAX AND FISCAL ENVIRONMENT								INVESTING IN			
			Stability/ Balance		Fairness		Equalization		FINAL		Support for Education			
											Pupil $, K-12		Pupil $, Higher	
	Permits	Audits	Score	Rank	Score	Rank	Score	Rank	SCORE	RANK	%	Rank	%	Rank
Alabama	■		96.14	26	8.57	50	67.86	7	172.57	40	25.71	33	38	9
Alaska		■	67.84	45	34.00	33	87.66	1	189.50	29	46.22	1	95	1
Arizona		■	108.05	14	47.57	16	56.08	26	211.70	12	22.37	47	24	26
Arkansas	■	■	91.28	34	25.97	42	54.40	28	171.65	44	25.46	35	44	5
California	■	■	133.72	2	71.00	1	64.56	14	269.28	1	22.63	44	23	31
Colorado	■	■	108.02	15	55.68	8	42.22	41	205.92	16	27.18	29	22	36
Connecticut	■		94.47	29	45.00	20	39.16	43	178.63	33	27.25	28	16	46
Delaware	■		91.91	32	39.48	26	76.76	5	208.15	14	31.89	9	24	26
Florida		■	90.41	36	35.00	32	58.89	21	184.30	30	27.29	27	26	24
Georgia		■	123.98	6	17.77	48	56.51	25	198.26	24	24.06	40	32	16
Hawaii		■	91.38	33	23.57	45	77.18	3	152.13	28	27.54	24	39	8
Idaho		■	104.50	20	38.68	27	60.28	20	203.46	18	22.70	43	33	15
Illinois	■	■	89.12	38	27.77	40	46.80	34	163.69	46	24.63	39	19	43
Indiana	■	■	128.42	4	23.77	44	62.72	18	214.91	9	25.37	36	24	26
Iowa	■	■	94.51	28	49.77	12	55.15	27	199.43	22	27.41	26	22	36
Kansas	■	■	90.83	35	35.77	30	46.27	37	172.87	38	28.52	16	24	26
Kentucky	■	■	106.48	17	24.37	43	66.88	10	197.73	25	26.33	32	35	11
Louisiana			89.97	37	46.77	17	63.48	17	200.22	21	27.70	22	34	14
Maine	■	■	134.83	1	46.17	18	47.38	33	228.38	5	28.40	17	21	39
Maryland		■	133.22	3	56.78	7	42.14	42	232.14	4	27.60	23	22	36
Massachusetts		■	120.23	8	39.77	25	67.02	9	227.02	6	28.56	15	13	49
Michigan	■	■	126.78	5	41.77	22	37.91	44	206.46	15	27.98	19	23	31
Minnesota	■	■	114.84	10	68.68	2	64.56	14	248.08	2	28.14	18	28	19
Mississippi	■	■	85.01	39	36.78	29	76.78	4	198.57	23	25.29	37	47	2
Missouri	■	■	106.16	18	32.17	37	42.29	40	180.62	32	23.93	41	19	43
Montana	■	■	53.78	49	48.77	13	31.37	48	133.92	48	36.30	3	31	17
Nebraska		■	100.06	23	48.68	14	25.82	50	174.56	37	23.89	42	21	39
Nevada			60.83	47	40.00	24	71.32	6	172.15	42	20.40	50	27	21
New Hampshire			38.43	50	30.00	39	33.64	47	102.07	50	21.11	49	8	50
New Jersey	■		65.59	46	32.77	36	53.13	30	151.49	47	32.37	7	23	31
New Mexico		■	98.36	24	41.77	22	85.95	2	226.08	7	31.27	10	45	4
New York	■	■	102.27	21	64.88	4	46.72	35	213.87	10	35.90	4	20	41
North Carolina	■	■	109.81	13	20.37	47	66.25	12	196.43	26	29.17	13	35	11
North Dakota			56.10	48	54.68	9	61.40	19	172.18	41	29.17	13	35	11
Ohio	■	■	115.48	9	51.57	11	46.19	38	213.24	11	26.88	30	20	41
Oklahoma		■	82.97	40	31.57	38	56.65	24	171.19	45	22.56	46	27	21
Oregon	■	■	79.87	42	64.37	5	33.88	46	178.12	34	32.81	6	23	31
Pennsylvania	■	■	111.99	12	44.77	21	46.63	36	203.39	19	31.10	11	18	45
Rhode Island		■	101.45	22	52.98	10	49.08	31	203.51	17	33.73	5	14	47
South Carolina	■	■	121.17	7	35.68	31	64.71	13	221.56	8	27.82	20	42	6
South Dakota	■	■	74.45	44	27.00	41	28.19	49	129.64	49	27.82	20	42	6
Tennessee		■	81.44	41	48.00	15	42.31	39	171.75	43	22.63	44	31	17
Texas		■	94.07	30	33.00	35	54.27	29	181.34	31	25.54	34	28	19
Utah	■	■	105.52	19	38.57	28	58.31	22	202.40	20	21.95	48	27	21
Vermont	■		77.61	43	60.68	6	37.63	45	175.92	35	29.61	12	14	47
Virginia	■	■	106.57	16	17.57	49	48.46	32	172.60	39	24.88	38	25	25
Washington	■	■	92.38	31	34.00	33	67.54	8	193.92	27	26.86	31	24	26
West Virginia	■	■	98.26	25	45.77	19	66.81	11	210.84	13	27.53	25	37	10
Wisconsin	■	■	114.62	11	68.37	3	64.46	16	247.45	3	32.28	8	23	31
Wyoming		■	95.06	27	23.00	46	57.55	23	175.61	36	40.97	2	46	3

Please refer to *Policy Index Data Sources* and the *Policy Index* for further detail on individual measures.

EDUCATION

INVESTING IN INFRASTRUCTURE AND AMENITIES

Pupil/Teacher		Salary Changes		Reform of Education					Pub Capital Budgeting			Environmental Policy			Farmland Protection			
Ratio	Rank	%	Rank	H.S. Grad. Require.	Computer Literacy	Compens. Educa.	Teacher Mentors	Teacher Incents.	Facility Inventory	Needs Assess.	Capital Plans	Right-to-Know Laws	Super-Fund Statutes	Emiss. Fees	Right-to-Farm Laws	Dev. Rts. Purchase	Dev. Rts. Transfer	Agri. Dist. Ordins.
20.2	**43**	**−1.89**	**49**					■	■	■	■			■	■			
15.8	12	1.44	46									■	■		■			
19.6	**41**	**8.53**	**7**			■				■	■		■	■	■			
17.5	25	2.31	45	■	■	■	■	■					■	■	■	■	■	
23.1	**49**	**6.87**	**17**			■		■	■	■	■	■	■	■	■		■	■
18.4	33	5.77	24											■	■			
14.0	**1**	**11.01**	**3**	■		■								■	■	■		
16.2	16	11.54	2			■				■	■	■		■	■			
16.6	**19**	**7.11**	**14**	■		■	■	■	■	■	■		■	■	■		■	
18.8	36	6.88	16			■	■								■			
22.6	**48**	**0.21**	**48**			■								■	■			■
20.3	44	2.41	44												■			
17.8	**29**	**4.10**	**32**						■	■	■		■	■	■			■
18.6	34	3.89	36	■		■	■	■			■		■	■	■			
15.3	**9**	**3.67**	**38**									■	■		■			■
15.4	10	3.46	41							■	■		■	■	■			
19.2	**40**	**7.25**	**12**	■		■	■						■	■	■			■
18.6	34	−1.98	50	■	■				■	■	■	■	■	■	■			
14.5	**4**	**8.55**	**6**		■		■	■				■	■	■	■	■	■	
17.5	25	8.70	5	■		■			■	■	■	■	■	■	■	■	■	■
14.9	**5**	**6.77**	**20**			■		■		■	■	■	■	■	■	■		
20.6	46	7.23	13	■		■			■	■	■	■	■		■			
17.1	**23**	**3.58**	**40**			■				■	■		■	■	■			■
18.1	30	5.28	29						■	■					■			
16.5	**17**	**6.80**	**19**			■		■			■	■	■	■	■			
15.9	14	7.63	9									■	■		■			
15.0	**6**	**4.62**	**31**												■			
20.0	42	5.30	28						■	■	■			■				
15.9	**14**	**7.93**	**8**		■					■	■	■	■	■	■	■		
15.0	6	2.56	43	■		■		■	■	■	■	■	■	■	■	■	■	■
18.8	**36**	**6.44**	**21**	■	■				■	■	■		■		■			
15.8	12	4.95	30			■		■	■	■	■		■	■	■			■
18.8	**36**	**5.78**	**22**			■	■					■		■	■			■
18.8	36	5.78	22											■	■			
18.3	**32**	**7.10**	**15**			■			■		■	■	■	■	■			■
16.6	19	0.43	47				■		■	■	■			■	■			
18.2	**31**	**4.00**	**34**						■	■	■	■	■	■	■			■
16.6	19	5.47	26	■		■	■	■		■		■	■		■	■		■
15.1	**8**	**5.46**	**27**			■					■	■			■	■		
17.5	25	7.52	10	■	■	■	■	■					■		■			
17.5	**25**	**7.52**	**10**		■													
20.3	44	3.72	37		■	■		■	■	■	■	■	■		■			
17.4	**24**	**6.86**	**18**	■		■		■				■	■	■	■			
23.6	50	3.63	39		■	■		■						■	■			
14.1	**2**	**13.28**	**1**	■						■	■	■	■		■	■		
16.9	22	8.91	4			■	■			■	■				■		■	■
20.7	**47**	**4.03**	**33**			■		■	■	■	■	■	■		■		■	
15.7	11	3.98	35									■	■		■			
16.5	**17**	**5.56**	**25**		■	■				■			■	■	■			
14.4	3	2.80	42						■	■	■							

	INVESTING IN INFRASTRUCTURE AND AMENITIES continued										MOBILIZING		
	Assuring Affordable Housing						Public Health Assistance		Arts Approps. per capita		Reforming Finance Regs.		
	Housing Constr.	Housing Rehab.	Tenants Support	Home Ownshp.	Predev. Costs	Housing Trust	Score	Rank	$	Rank	Branch Banking	Pension Invest.	CRAs
Alabama							**158**	**47**	**0.24**	**42**	■		
Alaska	■	■	■	■	■		185	30	4.10	1	■		
Arizona							**146**	**48**	**0.34**	**36**	■		
Arkansas		■					160	45	0.42	32			
California	■	■	■	■	■	■	**245**	**6**	**0.47**	**28**	■		
Colorado	■	■		■	■		196	23	0.50	26		■	
Connecticut	■	■	■	■	■		**247**	**5**	**0.52**	**24**	■	■	
Delaware	■	■		■	■	■	184	31	0.95	12	■	■	
Florida		■			■		**191**	**29**	**1.09**	**8**			
Georgia							195	25	0.44	31			
Hawaii							**218**	**16**	**2.15**	**4**	■		
Idaho							169	43	0.13	50	■		
Illinois		■					**217**	**17**	**0.76**	**17**		■	
Indiana		■		■			192	26	0.34	36	■		■
Iowa							**222**	**11**	**0.26**	**41**		■	
Kansas							207	20	0.23	44	■		
Kentucky							**196**	**23**	**0.53**	**23**			
Louisiana							176	39	0.21	45			
Maine	■	■	■	■	■	■	**222**	**11**	**0.41**	**33**	■		
Maryland	■	■	■	■		■	220	13	1.07	9	■		
Massachusetts	■	■	■	■	■		**253**	**4**	**3.13**	**2**	■		■
Michigan	■	■		■	■		224	10	1.25	6		■	■
Minnesota							**264**	**1**	**0.66**	**18**		■	
Mississippi							133	50	0.16	49	■		
Missouri							**159**	**46**	**0.83**	**14**			■
Montana	■			■			201	22	1.03	10			
Nebraska							**209**	**19**	**0.36**	**35**			
Nevada	■						167	44	0.18	47	■		
New Hampshire							**177**	**37**	**0.33**	**39**	■	■	
New Jersey						■	235	7	1.77	5	■		
New Mexico	■	■					**177**	**37**	**0.47**	**28**			
New York	■	■	■	■	■		260	3	2.73	3	■	■	■
North Carolina							**180**	**35**	**0.63**	**20**	■		
North Dakota							180	35	0.63	20			
Ohio	■	■	■		■		**192**	**26**	**0.85**	**13**		■	■
Oklahoma							172	41	0.46	30			
Oregon					■		**228**	**9**	**0.19**	**46**	■	■	
Pennsylvania				■	■		213	18	0.65	19	■	■	
Rhode Island	■				■		**219**	**14**	**0.61**	**22**	■		
South Carolina							183	32	0.82	15	■		
South Dakota							**183**	**32**	**0.82**	**15**	■		
Tennessee				■			181	34	0.29	40			
Texas							**173**	**40**	**0.18**	**47**			
Utah							202	21	0.98	11	■		
Vermont							**219**	**14**	**0.49**	**27**	■	■	
Virginia							171	42	0.51	25			
Washington						■	**229**	**8**	**0.38**	**34**	■	■	■
West Virginia		■		■	■		192	26	1.11	7			■
Wisconsin		■		■			**261**	**2**	**0.24**	**42**		■	
Wyoming							141	49	0.34	36			

CAPITAL							PROMOTING NEW ENTERPRISES & STRENGTHENING EXIST'G BUSINESSES										
New Institutions				Improv. Info. & Reducing Risk										Export Assistance			
Quasi-Publics	BDC's	Loan Funds	BIDCOs	Loan Guars.	Invest. Networks	Export Finance	R&D Grants	R&D Centers	SBACs	Incubators	Tech. Transfer	Empl. Ownshp.	Lab/ Mgmt. Asst.	Buyers/ Sellers	Pubns.	Counseling	Seminars
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■		■				■	■	■	■		■	■	■	■	■	■	■
■	■	■		■	■		■		■					■	■	■	■

	INVESTING IN DISADVANTAGED INDIV. AND COMMUNITIES						AGRICULTURAL DEVELOPMENT*			
	AFDC Benefits		Transfer Invest.		Commty. Devmt.	Rapid Response	Agricultural Finance			Agric. Divers.
	%	Rank	Score	Rank			Linked Loans	Direct Loans	Agric. IDBs	
Alabama	16.11	50	133	48		■			■	■
Alaska	56.88	2	98	28				■		■
Arizona	31.86	32	70	14		■				
Arkansas	24.98	46	110	38		■		■		■
California	53.08	4	39	5		■				
Colorado	32.87	29	45	9					■	
Connecticut	43.28	14	47	11		■				
Delaware	30.01	35	46	10					■	■
Florida	26.51	42	73	15	■					
Georgia	27.85	40	126	44					■	■
Hawaii	45.44	11	123	43				■		
Idaho	36.22	23	113	40		■				
Illinois	29.95	36	94	27			■	■	■	■
Indiana	28.94	37	101	32	■		■		■	■
Iowa	38.46	20	100	31			■	■	■	■
Kansas	38.13	21	99	29		■	■			■
Kentucky	26.29	43	132	46		■			■	
Louisiana	25.02	45	130	45					■	
Maine	48.75	7	30	2			■	■		■
Maryland	30.29	34	38	4						
Massachusetts	39.68	19	3	1	■	■			■	■
Michigan	49.05	6	89	23	■		■		■	
Minnesota	50.03	5	52	12	■			■		■
Mississippi	17.59	49	149	50		■		■		■
Missouri	28.59	38	121	42			■	■	■	
Montana	43.48	13	135	49		■	■	■	■	■
Nebraska	34.34	26	99	29				■	■	■
Nevada	27.21	41	103	33						
New Hampshire	34.43	25	44	8	■					
New Jersey	30.69	33	75	17						
New Mexico	33.59	27	110	38					■	■
New York	42.09	15	39	5						■
North Carolina	27.96	39	132	46		■			■	■
North Dakota	41.16	16	104	35			■	■	■	■
Ohio	32.54	30	32	3	■	■	■		■	■
Oklahoma	36.93	22	57	13					■	
Oregon	44.16	12	81	21	■					■
Pennsylvania	40.40	17	74	16		■		■		
Rhode Island	47.69	10	91	24						
South Carolina	25.95	44	77	19		■			■	
South Dakota	40.13	18	104	35			■	■	■	■
Tennessee	19.37	47	79	20		■				■
Texas	19.35	48	103	33		■			■	■
Utah	48.74	8	105	37		■		■		■
Vermont	60.11	1	41	7						
Virginia	32.37	31	92	25					■	
Washington	48.21	9	83	22		■		■		
West Virginia	35.11	24	92	25		■				
Wisconsin	50.73	3	75	17	■	■	■	■	■	■
Wyoming	33.54	28	118	41			■	■		■

*Informational subindex only. This data was not used to calculate the *Policy Index* grades.

Policy Data Sources

Note: This year, data on state programs and policies collected through the secondary sources listed below were supplemented through a direct survey of the states. To conduct the survey, CfED attempted to establish a consistent contact in every state government, assigned through the Governor's office, to respond to the state policy survey which was constructed and distributed by CfED. Data gathered in this manner are generally current through December 1987. Altogether, thirty-six states chose to respond to the survey, with varying degrees of completeness.

Subindex One: Improving Governance and Regulation

Streamlined Permitting

States with one-stop permitting systems, 1985.
Source: U.S. Small Business Administration, Office of Advocacy, *Directory of State Business Issues: Looking Toward the Future* (Washington, D.C.: Government Printing Office, October 1985); and U.S. Small Business Administration, Office of Advocacy, "State Small Business Activities," updated, unpublished table, 1986.

Legislative Oversight and Audit

States with a legislative audit offices, 1985.
Source: National Conference of State Legislatures, "Legislative Program Evaluation in the States," testimony by Rich Jones to the Oregon Joint Committee on Program Evaluation, Salem, Oregon, March 31, 1986.

Subindex Two: Creating a Stable and Equitable Tax and Fiscal Environment

Fiscal Stability and Balanced Revenue Sources

Assessment of fiscal stability and balance of revenue sources, by state. Score.
Source: The Corporation for Enterprise Development, "The Tax and Fiscal Policy Index," research report for the Economic Climate Project, January 1988.
Please see Appendix D for complete text of report.

Tax Fairness

Assessment of tax fairness, by state. Score.
Source: The Corporation for Enterprise Development, "The Tax and Fiscal Policy Index," research report for the Economic Climate Project, January 1988.
Please see Appendix D for complete text of report.

Fiscal Equalization

Assessment of fiscal equalization, by state. Score.
Source: The Corporation for Enterprise Development, "The Tax and Fiscal Policy Index," research report for the Economic Climate Project, January 1988.
Please see Appendix D for complete text of report.

Final Score

Tax and fiscal environment, by state. Score.
Source: The Corporation for Enterprise Development, "The Tax and Fiscal Policy Index," research report for the Economic Climate Project, January 1988.
Please see Appendix D for complete text of report.

Subindex Three: Investing in Education

Support for Education

- *Pupil Spending, K-12*
  Current expenditures for public elementary and secondary schools, per pupil (average daily attendance) as percent of per capita income, 1985-1986.
  Source: State Policy Research, Inc., "Table G-14, *State Policy Data Book '87* (Alexandria, VA: State Policy Research, Inc., 1987).

- *Pupil Spending, Higher Education*
  State support of higher education per pupil (full-time equivalent) as percent of per capita income, 1985-1986.
  Source: State Policy Research, Inc., "Table G-39," *State Policy Data Book '87* (Alexandria, VA: State Policy Research, Inc., 1987).

- *Pupil/Teacher Ratio*
  Pupils per teacher, 1985-1986
  Source: State Policy Research, Inc., "Table G-21," *State Policy Data Book '87* (Alexandria, VA: State Policy Research, Inc., 1987).

- *Changes in Teacher Salary*
  Percent change in average teacher salary, 1986-1987.
  Source: American Federation of Teachers, Department of Research, "Survey and Analysis of Salary Trends," Washington, D.C., 1987.

Reform of Education

- *High School Science and Math Graduation Requirements*
  States with high school science and math requirements, 1987.
  Source: Education Commission on the States, *Clearinghouse Notes*, August 1987.

- *Computer Literacy*
  States with student computer literacy programs, 1985.
  Source: Education Commission on the States, *Clearinghouse Notes,* September 1985, November 1985, and August 1986; and Chris Pipho, "States Move Reform Closer to Reality," *Kappa Special Report*, December 1986.

- *Remedial and Compensatory Programs*
  States with state-funded compensatory education and remediation programs, 1986.
  Source: National Governors' Association, *Results in Education: 1987* (Washington, D.C.: National Governors' Association, 1987).

- *Teacher Mentors*
  States with statewide teacher mentor internship programs, 1986.
  Source: National Governors' Association, *Results in Education: 1987* (Washington, D.C.: National Governors' Association, 1987).

- *Teacher Incentives*
  States with statewide teacher incentive programs for recruiting and retaining teachers, 1986.
  Source: National Governors' Association, *Results in Education: 1987* (Washington, D.C.: National Governors' Association, 1987).

Subindex Four: Investing in Infrastructure and Amenities

Public Capital Budgeting

- *Facility Inventory*
  States that maintain a central unified inventory of public facilities, 1987.
  Source: National Conference of State Legislatures, *Capital Budgeting and Finance* (Denver: National Conference of State Legislatures, November 1987).

- *Needs Assessments*
  States that provide regular assessments of facility conditions and investment needs, 1987.
  Source: National Conference of State Legislatures, *Capital Budgeting and Finance* (Denver: National Conference of State Legislatures, November 1987).

- *Capital Plans*
  States that develop long-range capital plans to guide annual capital budget requests, 1987.
  Source: National Conference of State Legislatures, *Capital Budgeting and Finance* (Denver: National Conference of State Legislatures, November 1987).

Environmental Policy

- *Community "Right-to-Know"*
  States with "right-to-know" laws concerning hazardous waste, 1986.
  Source: Fund for Renewable Energy and the Environment, *The State of the States, 1987* (Washington, D.C.: Fund for Renewable Energy and the Environment, 1987).

- *State Superfunds*
  States authorized by law to assess hazardous waste sites, initiate remedial clean-up actions and/or enforce assessments on responsible parties, 1986.
  Source: Fund for Renewable Energy and the Environment, *The State of the States, 1987* (Washington, D.C.: Fund for Renewable Energy and the Environment, 1987).

- *Air Permit and Emissions Fees*
  States with air permits and emissions fees, 1986.
  Source: State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Officials, "Air Permit and Emission Fees: Results of a Survey," April 1987.

Farmland Protection

- *Right-to-Farm Laws*
  States with laws to protect farmers from certain legal actions against normally accepted farming practices, 1986.
  Source: National Association of State Departments of Agriculture, *Farmland Notes*, January 1987.

- *Development Rights — Purchase*
  States that may purchase the development rights of farmland by paying the owner the difference between the market value and farm-use value of the land, 1986.
  Source: National Association of State Departments of Agriculture, *Farmland Notes*, January 1987.

- *Development Rights — Transfer*
  States that allow qualifying developers to increase development density in designated receiving areas if they purchase development rights from farmers whose property is in other designated sending areas to protect their use of land for farming, 1986.
  Source: National Association of State Departments of Agriculture, *Farmland Notes*, January 1987.

- *Agriculture District Ordinances*
  States that allow farmers to organize land into legally recognized geographic areas restricted to agricultural use, 1986.
  Source: National Farmland Trust, Staff Interview, 1987.

Assuring Affordable Housing

- *Housing Construction*
  States that use own-source fund to finance new housing construction, 1986.
  Source: Council of State Community Affairs Agencies, *State Housing Initiatives*, (Washington, D.C.: Council of State Community Affairs Agencies, 1986.)

- *Housing Rehabilitation*
  States that use own-source funds to provide financial assistance for housing rehabilitation, 1986.
  Source: Council of State Community Affairs Agencies, *State Housing Initiatives*, (Washington, D.C.: Council of State Community Affairs Agencies, 1986.)

- *Tenant Support*
  States that use own-source funds for financial assistance to tenants, 1986.
  Source: Council of State Community Affairs Agencies, *State Housing Initiatives*, (Washington, D.C.: Council of State Community Affairs Agencies, 1986.)

- *Home Ownership*
  States that use own-source funds to provide financial assistance for home ownership, 1986.
  Source: Council of State Community Affairs Agencies, *State Housing Initiatives*, (Washington, D.C.: Council of State Community Affairs Agencies, 1986.)

- *Pre-Development Costs*
  States that use own-source funds for financial assistance for land acquisition and/or development, 1986.
  Source: Council of State Community Affairs Agencies, *State Housing Initiatives*, (Washington, D.C.: Council of State Community Affairs Agencies, 1986.)

- *Housing Trust Funds*
  States with dedicated funds for housing construction, 1986.
  Source: Housing Trust Fund Project, Staff Interview, Oakland, CA, 1987.

Access to Public Health Assistance

Index of eligibility, services, types of providers, quality and reimbursements of state Medicaid programs, 1986.
Source: Public Citizen Health Research Group, *Poor Health Care for Poor Americans: A Ranking of State Medicaid Programs* (Washington, D.C.: Public Citizen Health Research Group, 1987).

State Arts Agency Appropriations

State arts agencies appropriations per capita, fiscal year 1987.
Source: Annual Survey (Washington, D.C.: National Assembly of State Arts Agencies, November 1987).

Subindex Five: Mobilizing Capital

Reforming Finance Regulations

- *Intrastate Branch Banking*
  States which allow intra-state banking, 1985.
  Source: Conference of State Banking Supervisors, *Annual Survey of State Banking Statutes*, (Washington, D.C.: Conference of State Banking Supervisors, January 1986).

- *Pension Fund Investment*
  States which invest public pension funds in venture capital, 1987.
  Source: U.S. Small Business Administration, *Capital Formation in the States* (Washington, D.C.: Government Printing Office, January 1988).

- *Community Reinvestment Act*
  States with community reinvestment acts, 1986.
  Source: National Center for Policy Alternatives, Staff Interview, Washington, DC, 1986.

Creating New Institutions

- *Quasi-Public Venture Capital Funds*
  States with publicly-capitalized venture capital corporations, 1987.
  Source: U.S. Small Business Administration, *Capital Formation in the States* (Washington, D.C.: Government Printing Office, January 1988).

- *Business Development Corporations*
  States with business development corporations, 1985.
  Source: The National Association of Development Agencies, *Directory of Incentives for Business Investment and Development in the United States, Second Edition* (Washington, D.C.: The Urban Institute, 1986).

- *Loan Funds*
  States with government loan funds, 1985.
  Source: The National Association of Development Agencies, *Directory of Incentives for Business Investment and Development in the United States, Second Edition* (Washington, D.C.: The Urban Institute, 1986).

- *Business and Industrial Development Corporations*
  States with business and industrial development corporations (BIDCOs), 1985.
  Source: The National Association of Development Agencies, *Directory of Incentives for Business Investment and Development in the United States, Second Edition* (Washington, D.C.: The Urban Institute, 1986).

Improving Information and Reducing Risk

- *Loan Guarantees*
  States with loan guarantee programs, 1985.
  Source: The National Association of Development Agencies, *Directory of Incentives for Business Investment and Development in the United States, Second Edition* (Washington, D.C.: The Urban Institute, 1986).

- *Investment Networks*
  States with computerized investor networks, 1986.
  Source: University of New Hampshire, Professor Wetzel and associates, interview, 1987.

- *Export Financing*
  States that provide export financing assistance, 1986.
  Source: National Association of State Development Agencies, *State Export Program Database* (Washington, D.C.: National Association of State Development Agencies, 1986).

Subindex Six: Promoting New Enterprises and Strengthening Existing Businesses

Research and Development Challenge Grants

States with research and development grants, 1986.
Source: Minnesota Office of Science and Technology, "State Technology Programs in the U.S.," September 1986.

Research and Development Centers

States that finance research and development centers, 1986.
Source: Minnesota Office of Science and Technology, "State Technology Programs in the U.S.," September 1986.

Small Business Assistance Centers

States with small business development centers, 1986.
Source: U.S. Small Business Administration, staff interview, 1986.

Small Business Incubators

States with small business incubator programs, 1986.
Source: Minnesota Office of Science and Technology, "State Technology Programs in the U.S.," September 1986.

Technology Transfer

States with technology transfer programs, 1986.
Source: Minnesota Governor's Office of Science and Technology, "State Technology Programs in the U.S.," September 1986.

Employee Ownership Assistance

States with employee ownership assistance programs, 1986.
Source: National Center for Employee Ownership, staff interview, 1986.

Labor-Management Assistance

States with labor-management cooperation programs, 1985.
Source: U.S. Department of Labor, Labor-Management Services Administration, staff interview, 1986.

Export Assistance

- *Buyer/Seller Matching*
  States with programs that match foreign buyers with state businesses, 1986.
  Source: National Association of State Development Agencies, *State Export Program Database* (Washington, D.C.: National Association of State Development Agencies, 1986).

- *Publications*
  States with international business development publications, including newsletters and handbooks or directories with an international or export focus, 1986.
  Source: National Association of State Development Agencies, *State Export Program Database* (Washington, D.C.: National Association of State Development Agencies, 1986).

- *Counseling and Marketing Services*
  States that provide outreach, counseling and marketing services to state businesses on export assistance, 1986.
  Source: National Association of State Development Agencies, *State Export Program Database* (Washington, D.C.: National Association of State Development Agencies, 1986).

- *Seminars*
  States that hold seminars for businesses on export-related issues, 1986.
  Source: National Association of State Development Agencies, *State Export Program Database* (Washington, D.C.: National Association of State Development Agencies, 1986).

Subindex Seven: Investing in Disadvantaged Individuals and Communities

AFDC Benefit Adequacy

AFDC benefit level for a family of four as a percent of per capita income, January 1987.
Source: State Policy Research, Inc., "Table H-8," *State Policy Data Book '87* (Alexandria, VA: State Policy Research, Inc., 1987).

Transfer Payment Investment

Investment orientation of AFDC programs, 1986.
Source: The Corporation for Enterprise Development, "Transfer Payment Investment Index," research report for the Economic Climate Project, 1988. (Complete report is in Appendix D of *Making the Grade: The 1988 Development Report Card for the States*).

Community-Based Development

States with community-based development programs, 1986.
Source: National Congress for Community Economic Development, staff interview, Washington, DC, 1986.

Rapid Response Teams

States which have established rapid response teams, 1986.
Source: National Governors' Association, staff interview, Washington, D.C., 1986.

Subindex Eight: Agricultural Development

Agricultural Finance

- *Linked Deposit Loans*
  States that purchase certificates of deposit from commercial banks that agree to make loans to farmers at below market interest rates, 1986.
  Source: Council of State Governments, Center for Agriculture and Rural Development, "Selected State Financial Assistance Programs for Agriculture," Lexington, KY, 1987.

- *Direct Low Interest Loans*
  States that make agricultural loans from revolving or general funds, 1986.
  Source: Council of State Governments, Center for Agriculture and Rural Development, "Selected State Financial Assistance Programs for Agriculture," Lexington, KY, 1987.

- *Agricultural Industrial Development Bonds*
  States that use bond sale proceeds to fund agricultural loans, 1986.
  Source: Council of State Governments, Center for Agriculture and Rural Development, "Selected State Financial Assistance Programs for Agriculture," Lexington, KY, 1987.

Rural And Agricultural Diversification

States that have taken steps to diversify agriculture and rural economies, 1986.
Source: National Association of State Departments of Agriculture, *Farmland Notes*, September 1987.

Endnotes

1. For an excellent overview of this "revolution," see David Osborne, *The Next Agenda: Lessons from the Laboratories of Democracy* (Cambridge, MA: Harvard Business School Press, 1988); Roger Vaughan, Barbara Dyer and Robert Pollard, *The Wealth of States: Policies for a Dynamic Economy* (Washington, D.C.: Council of State Policy and Planning Agencies, 1986); The Corporation for Enterprise Development, *Building the New Economy: States in the Lead*, David R. Jones, Editor, (Washington, D.C.: Corporation for Enterprise Development, 1986); Marianne Clarke, *Revitalizing State Economies: A Review of State Development Policies and Programs* (Washington, D.C.: National Governors' Association, 1986); and Scott Fosler, *Partnership for State Economic Progress* (New York: Committee for Economic Development, April 1986) and Scott Fosler, *The New Economic Role of American States* (New York: Oxford University Press, 1988).

2. Andrew Reamer, "State and Local Development Policy: Copycat or Custom-Fit," *The Entrepreneurial Economy*, May 1985.

3. David Aschauer, "Is the Public Capital Stock too Low?" *Chicago Fed Letter*, October 1987.

4. For more background on business climate and taxes, see Karl Seidman, *The Role of Taxation in State Business Climate* (Washington, D.C.: The Corporation for Enterprise Development, 1987); The Corporation for Enterprise Development, *Business Climate Tax Index* (Washington, D.C.: The Corporation for Enterprise Development, 1987); and Appendix D of this document for the "1988 Business Climate Tax Index."

5. For a discussion of the merits of a balanced revenue system, see Robert Kleine and John Shannon, "Characteristics of a Balanced and Moderate State-Local Revenue System," in Steve Gold, *Reforming State Tax Systems* (Washington, D.C.: National Conference of State Legislatures, 1986). For a discussion of the limitations of this approach, see Helen F. Ladd and Dana R. Weist, "State and Local Tax Systems: Balance Among Taxes vs. Balance Among Public Goals," presentation at the Tax Policy Roundtable of Lincoln Institute of Land Policy, May 1987.

6. See, for example, U.S. Department of Education, *A Nation at Risk* (Washington, D.C.: Government Printing Office, 1986).

7. See Lawrence Litvak and Belden Daniels, *Innovations in Development Finance* (Washington, D.C.: Council of State Planning Agencies, 1979); Lawrence Litvak and Michael Barker, *Pension Funds and Economic Development* (Washington, D.C.: The Gallatin Institute, 1983); Council for Community Development, Inc., *Indiana's Financial Markets and Economic Development: A Fresh Approach* (Cambridge, MA: Council for Community Development, Inc., January 1984) and *Maine Small Business Finance* (Cambridge, MA: Council for Community Development, Inc., January 1983); The Corporation for Enterprise Development, *Capital Markets in South Carolina: New Directions for Private and Public Actors* (Washington, D.C.: The Corporation for Enterprise Development, February 1985); and Peter Kwass and Beth Siegel, *Profile of Michigan's Commercial Banking Industry: Implications for Small Business*

Capital Availability (Washington, D.C.: The Corporation for Enterprise Development, January 1986).

8. For research on this issue, see James Botkin, Dan Dimancesh and Ray Stata, *Global Stakes: The Future of High Technology in America* (Cambridge, MA: Ballinger Publishing Company, 1982); James Hickman and John Strong, "The Evolution of New England Industry," *New England Economic Review*, March/April 1986; U.S. Congress, Joint Economic Committee, "Location of High Technology Firms and Regional Economic Development," June 1, 1982; and U.S. Congress, Office of Technology Assessment, *Technology, Innovation, and Regional Development* (Washington, D.C.: Government Printing Office, July 1984).

9. We do not believe that "coercive" work programs, in which recipients are required to "work off" their benefits, are desirable because most reliable data suggest that voluntary programs are cheaper, more effective and better address the true barriers to self-sufficiency. See the upcoming Robert E. Friedman, *Safety Net as Ladder: Transfer Payments and Economic Development* (Washington, D.C.: Council of State Policy and Planning Agencies, projected publication in 1988).

In Search of Better Measures

No index can hope to capture the full complexity and dynamics of a state economy. The best we can do is take a "stop-action photo" of the economies of the states in the race for the future. Despite this drawback, we continue to strive to produce a clearer picture.

The *1988 Development Report Card for the States* includes many new or refined measures. These changes make the 1988 results better than the 1987 results, but they also make comparisons between the two years difficult. We expect next year's measures to change less dramatically, making direct comparisons easier.

But we still seek improvements. In the Performance Index, we will seek improved measures in four areas:

- First, in the Employment subindex, we will attempt to account for the proportion of full-time jobs to part-time or seasonal ones.

- Second, in the Income and Job Quality subindex, we will attempt to control directly for differences in cost of living (a task we pursued without success this year), and we will pursue measures of job quality beyond just health coverage.

- Third, in the Equity Subindex, we will seek to portray more clearly disparities among both individuals and communities. Specifically, in recognition of the increasing importance of women's earnings to family incomes and the slowly improving relationship between the rewards for work and the effort made, we will pursue a state-by-state measure of women's earnings in relation to men's. And, to more accurately reflect the growing trend toward "split-level" economies, we will pursue measures that illuminate urban-rural and other disparities among communities and regions.

- Fourth, we will continue to seek appropriate and universal measures for portraying the existing quality of life outputs in each state — the safety of drinking water, the quality of air, the availability of recreational facilities, the richness of cultural amenities, and more — the things which, taken together, represent a key component of how well economies are performing.

Perhaps our greatest challenge is to find measures that accurately portray the vitality of existing businesses in state economies. Measures of firm profitability and dynamic flexibility — new management practices, adoption of new technology, international marketing orientation — are hard to come by, but they are crucial to an accurate Competitiveness of Existing Business subindex. We would also like to be able to gauge the extent to which states cultivate self-employment, both to improve incomes and to plant the seeds of larger businesses. Finally, we will seek measures of Structural Diversity which do not penalize states that have many sectors experiencing strong growth.

In the Capacity Index, we will seek better ways to measure the outputs of the education and financial system, not just the inputs — for example, educational competency measures, direct measures of seed and risk capital availability, and more accurate housing cost and amenity variables. In addition, next year we hope to be able to introduce a new subindex, Local Institutional Capacity, designed to address the capacity of communities to stimulate and support economic development activity. Measures might include the number and quality of non-profit development organizations, the existence of public-private partnerships, and the presence of skilled staff devoted to cultivating local activity, among others.

Finally, in the Policy Index, there are a number of areas and initiatives we will pursue — such as improved measures of government regulation,[1] training initiatives, and distressed area development. But the overwhelming challenge is to assess the *quality* of the initiatives, not simply their quantity, and to keep track of the innovation that occurs constantly.

We believe deeply that all states can move forward, and offer the *Development Report Card for the States* as a tool toward that end. Ultimately, we will take our grade on how helpful the *Report Card* is in our mutual quest.

Endnote

1. For an example of such an analysis, see Bernard L. Weinstein and Harold T. Gross, *Texas' Business Climate: Good or Bad?* (Dallas: Center for Enterprising, Edwin L. Cox School of Business, Southern Methodist University, November 1987).

Appendix A: Notes on Methodology and the Development Model

The Development Model

This is the second year we have presented our assessment — in the form of a *Development Report Card* — of how supportive each state's economic environment is for business development. During the course of the year, state economies have continued to evolve. But the heart of the *Report Card* remains its model of the development process. Stated simply, our understanding of the development process follows.

- What we seek from an economy is long-term, widely-shared increases in our standard of living — tangible and intangible.

- The economy's performance largely results from the vitality of the business community, which organizes and manages most economic activity. Business vitality is rooted in competitive edge, diversity, market strength and long investment horizons, as well as the ability of new firms to start up and older ones to innovate and adapt.

- Business vitality springs from effectively using and augmenting the building blocks of development: human skills, finance, technology, natural resources and amenities. We call these development ingredients a state's capacity.

- Government policies can foster or undermine performance, capacity and vitality — thereby leading to stronger or weaker economic performance.

This model incorporates the findings from an extensive literature review of the dynamics of development and the obstacles to economic growth.[1] Our research has been guided by a technical advisory board composed of economic experts and representatives from business, labor, government and community development organizations, while drawing upon our own experience in the economic development field.

Report Card Rationale and Cautions

Like school report cards, this one is intended to identify areas where greater individual effort is desirable and useful — it should be used as a tool for making progress and not as a punishment for past practices.

To produce the *Development Report Card*, we have resisted the temptation to construct one quantitative index that would enable ranking all the states from one to fifty. Although such a summary short-hand approach captures the public imagination and proves easy and dramatic to publicize, it also unduly telescopes the very complex process of development into a single number that means little to those who are more interested in strengthening their state's economy than in capturing newspaper headlines.

Numerical rankings also obscure similarities among states and tend to take on an importance out of proportion to their real value. So instead, we chose to assign "grades" — from *A* to *F* — to states with relatively similar levels of performance on our four separate indexes, thus providing benchmarks for evaluating the separate, but related, dimensions of state economic performance, business vitality, resource capacity and public policy. Though we recognized this could also distort, grades have the advantage of attracting attention and guiding that attention to these four most important dimensions.

As in school, there can be differences in actual scores within these grades but, given the inadequacy of available data, and the imprecision of some of the data available, grade ranges are as close as we believe anyone can reasonably come in sorting out the overachievers and underachievers.

By its very nature, assigning grades compares states relative to one another and does not convey a sense of absolute levels. So, for example, if a state has been lacking in financial capacity and makes significant strides in improving its capacity, it may still receive a low grade if other states have also made advancements in adding financial capacity at the same time.

What's New This Year?

Most of the significant changes in index and subindex construction since the 1987 *Development Report Card* are discussed within each index under this same heading: *What's New This Year?* We expect significantly fewer changes in future years largely because, whenever possible, we have tried to develop and choose measures that can be updated on an annual basis.

However, we should call to attention one overall change in how we assigned index and subindex grades. In the 1987 *Development Report Card*, grades within a subindex or index were assigned evenly: the top ten scoring states received *A*'s; the next ten, *B*'s; the third set, *C*'s; the fourth, *D*'s; and the bottom ten scores, *F*'s. The exception in 1987 was the Policy Index, where there were no subindex grades and the final grade was assigned according to what teachers would call a natural "curve" — that is, easily identifiable breaks in score clusters.

But we came to realize that this grading scheme was *too* harsh — 20 percent of the states earned failing grades — and gave a greater sense of precision to the middle range of grades than in fact was appropriate. So this year we altered how we assign *C*'s, *D*'s and *F*'s. The first ten index or subindex scores still receive an *A*, and the second ten *B*, but the next fifteen now receive a *C*, the following ten a *D*, and the remaining five an *F*.

Index Construction

Choosing Indexes, Subindexes and Variables

The actual construction of the four indexes in this *Development Report Card* is relatively straightforward. Each index is made up of a series of subindexes chosen on the basis of the determinants of economic development uncovered in our research.

The number of subindexes which form a final index varies from index to index:

- The Performance Index has three subindexes used in calculating the grade — Employment, Earnings and Job Quality and Equity.

- The Vitality Index has three subindexes — Competitiveness, Entrepreneurial Energy and Structural Diversity.

- The Capacity Index has four subindexes — Human Resources, Technology Resources, Financial Resources, and Infrastructure and Amenities.

- The Policy Index has seven subindexes falling under two broad categories:

Development Preconditions, comprised of the Governance and Regulation, Tax and Fiscal Environment, Education, and Investments in Infrastructure and Amenities subindexes; and

Development Initiatives, composed of Mobilizing Capital, Promoting New Enterprises and Strengthening Existing Businesses, and Assistance to Disadvantaged Individuals and Communities subindexes.

Subindexes are constructed with individual variable measures — like infant mortality or the unemployment rate. A number of the individual variable measures within the subindexes are themselves what we call *composite measures*. Actually, they might be considered sub-subindexes. A composite measure data score has been determined by examining several individual factors which contribute to it. Good examples of composite measures can been found in the Policy Index — in the three separate measures comprising the Tax and Fiscal Climate subindex, as well as in the *Transfer Payment Investment* measure.

Deriving the Scores, Ranks and Grades

The method of deriving a subindex and index ranks and grade is as follows:

- Variable data — the "score" — is collected for each state. The best score receives a ranking of 1. When a tie occurs, both states receive the same ranking, and then the next highest scoring state is ranked as if a tie had not occurred. For example, if the two best ranking states have identical variable scores, they both receive a rank of 1, and the next state is assigned a rank of 3.

- To compile a subindex, each individual state's rank for the variable measures are all added together. This created total is the subindex score. Subindex scores are then ranked from 1 to 50. Ties are treated in the same way as for individual variable measures.

- Creating a final index score involves a process very similar to creating the subindex scores. State ranks on each subindex are, as in the creation of subindexes, added together, creating an index score. The resulting scores are then ranked from 1 to 50.

- Grades are assigned to each subindex and index final score. In each case, the top ten scoring states receive *A*'s the next ten receive *B*'s; the middle fifteen receive *C*'s; the next ten receive *D*'s; and the final five receive *F*'s. (See *What's New This Year?* above.)

Variable and Subindex Weights

Assigning weights within each index to subindexes is at this time essentially arbitrary (and consistent), in that it largely depends on the number of subindexes within an index. We felt that the simplest and potentially least misleading technique would be to assign equal weights to subindexes in three indexes: Performance, Capacity and Policy. For example, in the Performance Index there are three subindexes. Therefore, each subindex carries a weight of 33 percent. Individual variable measures, consequently, have different effective weights, depending on the number of variables which compose a subindex. However, in the Business Vitality Index, because the Structural Diversity subindex contains only one individual variable measure — and, as we explain in the text, a limited one at that — we assigned it a weight of one-seventh, thus weighting each of the two other Vitality subindexes — Competitiveness and Entrepreneurial Energy — three-sevenths.

Endnote

1. A copy of the original bibliography developed for CfED's Economic Climate Project was published in the first edition (1987) of the *Development Report Card*. An updated bibliography is available from CfED upon request.

Appendix B: Rural States and the Economics of Necessity

For most of America's rural states, entrepreneurship — creating a business of one's own — is more than just a new trend: it is a practical economic necessity. In the face of formidable odds, people in rural communities are founding new businesses at remarkably high rates, given their economic performance and available resources, because, quite literally, it is the only game in town. This entrepreneurship is one of the brightest spots in the otherwise bleak picture of rural state economies illuminated by the *1988 Development Report Card for the States*.

After the booming decade of the 1970s, which many demographers heralded as an historic reversal of the decades-old flight of rural residents to the city, hard times returned with a vengeance to rural America in the 1980s. During the 1970s, rural areas posted a net increase in population of more than 350,000 people. But by 1982 the trend had reversed again and the losses grew. By 1986 America's rural population had declined by 632,000 people. Driven in part by the collapse of the farm economy, unemployment rates, which had been lower than in urban areas throughout the 1970s, exceeded unemployment rates in cities every year in the 1980s. What's more, when the recovery began to drive *urban* unemployment levels down in the mid-1980s, *rural* unemployment continued to rise. Poverty rates followed a similar pattern.[1] In 1979, rural poverty rates exceeded urban poverty rates by less than 30 percent; by 1986, that disparity had grown to nearly 50 percent.[2]

While not designed specifically to address these urban-rural disparities within a state, the *1988 Development Report Card for the States* does shed light on both the current economic condition of America's predominantly rural states and on what, if anything, these states are doing to improve their overall competitive position in the nation's economy.

We consider "rural" those states in which at least 50 percent of the labor force lives in non-metropolitan areas. By this definition, states that, geographically at least, appear highly rural — like Pennsylvania or New York — are excluded. Conversely, some states that do meet this definition are heavily influenced by a major urban area — the way southern New Hampshire and southern Maine, for example, are affected by Boston — but are included.

In all, we classify fifteen states as predominantly rural. These rural states fall generally into four geographic areas:

- New England: Maine, New Hampshire and Vermont;

- The Southeast and Appalachia: Arkansas, Kentucky, Mississippi and West Virginia;

- The Plains: Iowa, Nebraska, North and South Dakota; and

- The Mountain States: Idaho, Montana and Wyoming.

The fifteenth state is Alaska which, while in a region all its own, functions economically much like one of the Mountain States.

Rural Economic Performance

Not surprisingly, the economic performance of the rural states generally is not good. Nearly half score no better than a *D* in the Performance Index. Four more earn *C*'s. The three New England states are an exception with each receiving an *A* in Performance, though their rural areas lag behind the growth of their urban areas.

The Plains states receive *C*'s overall in the Performance Index, but at the subindex level — in Earnings and, to a lesser degree, Employment — their scores often fall to *D* or *F*. Their composite rankings would be lower were it not for good scores in the Equity subindex, caused principally by the homogeneity of their populations. The overall picture here is of economies slogging gamely along in the face of continuing adversity.

The rural states with the lowest scores in the Performance Index are the Southeastern/Appalachian states and the Mountain states. While the Southeastern states labor under the burden of a long legacy of rural poverty and under-investment, these two regions have some surprising similarities. Both depend economically on the production and export of low-value agricultural commodities and energy resources. They had done relatively well when these resources and commodities fetched high prices, but when these prices collapsed they had no alternative economic activity to fall back upon. While the rest of the nation prospers, these states have yet to recover.

Rural Business Vitality

The tendency of rural states to have low value-added economies is illustrated by the Competitiveness subindex of the Vitality Index. All but four of the rural states earn fair to poor grades in Competitiveness, largely because of the weakness of their traded sector businesses. The three New England states score *A*'s — a reflection of the boom in new business development in those states. West Virginia scores a surprising *A* because its dominant industry is mining, which is high in value-added. The price West Virginia pays for this dominance, however, shows up in the Structural Diversity subindex, where the state earns an *F*. Alaska is in a similar situation. Many of the other rural states score reasonably well in Diversity, suggesting that while their economies still tend to rely disproportionately on one or two industries, there is more to their economies than meets the eye.

Perhaps the most significant overall finding for rural states in the *Report Card* is the high degree of Entrepreneurial Energy they possess. Only three of the fifteen rural states score failing grades in entrepreneurship — that is, in the rate at which they create successful new businesses. And even these figures may be understated: they include only successful incorporations, not sole proprietorships or self-employment. For many residents of rural communities in which there are few conventional sources of employment, starting a business of their own is the only alternative to leaving town. Necessity, in short, becomes the mother of invention. Even in a state like Iowa, which received an *F* this year in the Entrepreneurial Energy subindex, there is growing evidence that more and more people are choosing to create their own businesses in order to maintain their rural roots.[3]

Rural Development Capacity

Will all these new businesses be able to grow? The scores these states earn in the Capacity Index cast a cloud over their future prospects.

With the notable exception of the Southeastern and Appalachian states, the rural states have exceptionally well-educated, work-ready workforces. High school attainment is very high, adult illiteracy is very low. To some extent, these results are artifacts of rural culture: the public high school is often the heart of the community and dropout levels tend to be very low. College attainment, however, is often low in these states, partly because this same culture has, in the past at least, not placed as high a priority on advanced education, and partly because those who do attend college go elsewhere to do so and then stay away, because there are few employment opportunities for them back home. So the rural states' results in the Educational Capacity subindex of the Capacity Index are mixed.

In the other three Capacity subindexes, however, the results are distressingly uniform. In the Technology, Finance and Infrastructure subindexes, the fifteen rural states score a total of thirteen *F*'s, fourteen *D*'s and thirteen *C*'s. There were no *A*'s and only five *B*'s. In short, there is a widespread pattern of inadequate investment in the basic building blocks of the economy. The foundation upon which businesses depend — for new ideas, for capital, and for basic infrastructure — is tenuous at best in these states. Without these building blocks, businesses both old and new have a more difficult time competing with businesses in other states where these investments are well established and diligently maintained.

To some extent, the poor grades these states earn in the Capacity Index is a result of their earlier success. When your economy depends, as many of these do, upon the income earned from the production of commodities or the extraction of natural resources, there is little incentive to make such investments. Only when the bubble breaks — when the bottom falls out of the markets for these basic goods — does it become clear how much needs to be done to develop a more diverse, more stable, more mature economy. And then it is often too late. Even the high-flying New England states face formidable capacity investment challenges. If they fail to act, their boom may be short-lived as well.

Rural Development Policies

It takes a long time to make up for years of underinvestment. Policies must be developed. Investments must be made. In time, the vitality of the state's businesses will improve and, with it, the employment and income performance of the economy.

Many rural states are hard at work developing policies and programs designed to turn their economies around — mobilizing capital, fostering new enterprises, rebuilding disadvantaged communities, improving government efficiency, reforming tax and fiscal policies and investing in education and infrastructure. In the Southeast and Appalachia, Arkansas and West Virginia are on the road to improvements. In New England, Maine and Vermont are working hard to ensure the long-term health of their booming economies; only New Hampshire appears to be coasting.

The story is very different, however, in the Plains and Mountain states. For the most part, the states in these regions seem at a loss to know how to take control of their own economic destinies. Their relative lack of action to establish the policy preconditions for development or to undertake the most basic initiatives suggests that they are simply waiting for the cycle to turn around again — marking time while their competitors race ahead. It may be a long wait. What's more, when their economies turn sour the next time, they will be no better prepared than they are today.

Looking Ahead

As a general rule, America's rural states trail far behind the urbanized states in the *1988 Development Report Card for the States*. The exceptions to this rule are rural states with the good fortune to share a border with a booming industrialized state like Massachusetts. The more dependent that rural states are on such highly cyclical industries as commodity production and natural resource extraction, the more moribund their economies.

These states are not without significant economic assets, however. They typically have a highly educated workforce — a key demand of the fast-growing, high value-added businesses that lead today's economy. They often have high amenity values — a pleasant environment, good schools and a strong sense of community — the kind of values employers who value the happiness of their employees tend to seek. And perhaps more important than either of these assets, some of these rural states exhibit a remarkable level of "can-do" entrepreneurship. Yes, these are "entrepreneurs of necessity," driven to found their own businesses by the absence of alternatives. But the point is that they chose to stay and create their own futures instead of leaving to seek them elsewhere. And they found others in the community willing to back them. If these rural states can strengthen their development policies and begin making needed investments in development capacity — as Maine and Vermont are doing — these assets can be the springboard to healthier, more resilient rural economies in the future.

Rural States Report Card

	PERFORMANCE INDEX				BUSINESS VITALITY INDEX				CAPACITY INDEX				
	Employmt. Grade	Earnings Job Qual. Grade	Equity Grade	FINAL GRADE	Business Competitiv. Grade	Entrepren. Energy Grade	Struct'l. Divers. Grade	FINAL GRADE	Human Resources Grade	Technolog. Resources Grade	Financial Resources Grade	Infrastruct. Amenities Grade	FINAL GRADE
Alaska	F	C	C	D	C	A	F	C	B	C	C	D	C
Arkansas	C	D	F	D	C	C	A	B	D	F	D	D	F
Idaho	C	F	C	D	C	B	B	C	A	C	D	F	D
Iowa	D	D	B	C	C	F	D	F	B	B	D	F	C
Kentucky	D	D	D	D	C	C	C	C	F	F	C	F	F
Maine	A	B	C	A	A	B	A	A	C	F	D	C	D
Mississippi	D	F	F	F	D	D	C	F	F	F	F	F	F
Montana	D	F	B	D	D	B	B	C	A	D	D	D	C
Nebraska	C	D	C	C	D	D	C	F	A	C	D	B	C
New Hampshire	A	A	A	A	A	A	C	A	B	B	C	C	C
North Dakota	C	F	C	C	C	C	C	C	B	D	D	C	D
South Dakota	C	D	B	C	F	C	B	D	B	F	C	C	D
Vermont	A	B	A	A	A	A	A	A	A	C	C	B	B
West Virginia	F	D	D	F	A	C	F	C	D	D	F	F	F
Wyoming	D	C	C	C	C	C	D	D	B	D	F	B	C

	POLICY INDEX							
	Governance Grade	Tax & Fiscal Grade	Education Grade	Infrastruc./ Amenities Grade	Mobiliz. Capital Grade	Enterprise/ Business Grade	Disadv. Indiv. & Commties. Grade	FINAL GRADE
Alaska	C	C	C	B	C	F	C	C
Arkansas	A	D	A	D	B	A	C	B
Idaho	C	B	F	F	D	F	B	F
Iowa	A	C	D	C	A	A	D	C
Kentucky	A	C	A	C	D	D	C	C
Maine	A	A	A	A	A	C	B	A
Mississippi	A	C	D	F	B	B	D	C
Montana	A	F	B	C	C	B	B	C
Nebraska	C	D	D	F	D	C	D	F
New Hampshire	F	F	D	C	B	F	A	D
North Dakota	F	D	C	D	C	D	D	F
South Dakota	A	F	B	F	C	C	D	D
Vermont	C	C	B	B	A	C	B	B
West Virginia	A	B	C	B	C	C	B	B
Wyoming	C	D	C	D	B	D	F	D

Endnotes

1. See U.S. Department of Agriculture, Agriculture and Rural Economy Division, *Rural Economic Development in the 1980's* (Washington, D.C.: Government Printing Office, July 1987) for a good discussion of current conditions in rural economies.

2. Kathryn H. Porter and Robert Greenstein, "Misperceptions of the Rural Poor and Implications for Welfare Policy," staff paper, Center for Budget and Policy Priorities, Washington, DC, 1987.

3. Mark Popovich and Terry Buss, *Rural Enterprise Development: An Iowa Case Study* (Washington, D.C.: Council of State Policy and Planning Agencies, 1987).

Appendix C: More on Traded Sector and Structural Diversity

For this year's *Development Report Card*, substantial time and effort were invested to develop new indicators of the competitiveness and diversity in a state's economy. Two brand new indicators developed — *Traded Sector Strength* and *Structural Diversity* — are crucial for evaluating the underlying health and vitality of businesses in a state. *Traded Sector Strength* reflects the value added by the key industries in a state, a good measure of its competitiveness. The level of *Structural Diversity* indicates how vulnerable a state may be to downturns in one or several of its critical industries.

Despite the fundamental importance of a competitive and diverse economy, there are no simple or straightforward measures to capture these dimensions of a state's business sector. We have had to rely instead on more complicated and less intuitive measures. We thought, therefore, that they deserved a more extensive explanation.

Traded Sector Strength

As described in the text, the engine of any state economy is its traded sector, comprised by those businesses producing goods and services in competition with firms outside the state. Traded sector firms bring new wealth into an economy by exporting goods and services, and they retain wealth in an economy by substituting for the goods and services that otherwise would have to be imported.

The ideal way to estimate traded sector income would be to use an up-to-date input-output table to calculate precisely the value of exports from a state's businesses. Unfortunately, such up-to-date data do not exist, the latest are over a decade old.

As an alternative, we calculate the size of a state's traded sector by the amount of income it brings into the economy for each civilian worker. Using 1986 data, we estimate for each industry in a state the amount of that industry's income derived from traded sector activities, and sum across all industries to arrive at traded sector income for the state.

Of course, the difficulty in designing such a measure is specifying which industries within an individual state's economy are, in fact, "traded." For several industries (as designated by SIC codes), we assumed that all their income is derived from traded activities. These include manufacturing, insurance carriers, metallic mining, forestry, farming and fisheries. We also designated additional industries as being partially-traded, including banking, securities, health services, educational services, hotels, amusements, wholesale trade and the federal government. These industries differ from state to state in the extent to which their activities are traded. For instance, while in most states banking is mainly a local, non-traded activity, in states like New York and Delaware, much banking activity is traded.

We used two steps to determine the extent to which the income from the partially-traded industries in each state should be counted as traded. First, we determined a location quotient for each industry in each state. A location quotient measures an industry's share of state employment relative to its share of national employment. A location quotient of 1.0 means that the industry has the same share of state employment as it does national employment. A quotient of 1.5 means that the industry's share of employment in the state is 50 percent more than its national share. Next we analyzed the distribution of location quotients for each partially-traded industry to determine the appropriate formula for estimating the percent of industry income which was traded. In each industry, the higher the location quotient, the higher the percent of income that is attributed to trading activity.

To calculate total traded sector income, incomes from the totally-traded and partially-traded sectors were added together. To arrive at the measure of *Traded Sector Strength*, we divided the sum of traded sector income by the number of civilian workers in a state to be able to compare across states.

Structural Diversity

In examining structural diversity, we are concerned not with how diverse a state's economic structure *looks* — for example, how its employment is distributed over a wide range of industries — but rather how diverse it *acts*. That is, in an economy that has structural diversity, when one industry is declining, others are growing or stable. We are, therefore, interested in the diversity of employment change, which provides a measure of protection against downside risk — we don't want to see all of a state's major industries declining at the same time. Our attention is again focused on traded sector industries, since these are the industries that generate wealth in a state.

We attempt to measure the extent of similarity in employment change from industry to industry — known in statistical terms as "covariance." When employment change is diverse, there is a significant amount of negative covariance between industries — so that when one industry is declining, another is growing, and vice-versa.

Obviously, it is important to adjust for the size of each industry, so our measure assigns an industry weight based on what percentage of traded sector employment it holds. The measure also takes into account the actual percentage change in employment in each industry — the higher the percentage, the greater the impact. Thus, if two key industries both decline significantly, the diversity measure is more unfavorably affected than if they both declined a small amount.

A weakness with this diversity measure is that it penalizes states in which all industries are growing. In fast-growth states with many sectors enjoying substantial gains, it is not clear that their industries will also decline together. Hence, this measure must be interpreted with care for fast-growth states like Arizona and Georgia. We will seek refinements next year to avoid this weakness.

To calculate *Structural Diversity*, we use these steps:

Each state's traded sector industries is determined by doing two things:

- First, we include each state's industries classified — according to two-digit SIC code — as manufacturing and mining, insurance carriers, farming, agricultural services or forestry and fisheries.

- We then add in those partially-traded industries in which more than 50 percent of the income is traded (as determined by the formulas discussed above in *Traded Sector Strength*).

Determining the state *Diversity* score involves two more steps.

- First, for every possible pair of included industries, a score is developed. The score is the covariance of employment change in those industries between 1979 and 1986 multiplied by the weight (based on employment size of sector) of one industry times the weight of the other.

- As the second step, the score for every pair of industries is summed to get the state *Diversity* score.

The structure of the *Diversity* formula is such that we aim to keep the number of traded industries in each state between 23 and 27, as too wide a variance would decrease the comparability of the state measures. Consequently, for some states we deleted industries with less than one-quarter of a percent (0.25%) of traded sector employment.

Appendix D: The Tax and Fiscal Policy Index

The Tax and Fiscal Policy Index comprises the Creating a Stable and Equitable Tax and Fiscal Environment subindex of the Policy Index. It includes three composite measures: *Fiscal Stability and Balanced Revenue Sources*, *Tax Fairness*, and *Fiscal Equalization*.

Fiscal Stability and Balanced Revenue Sources

A balanced revenue system that relies on a variety of taxes serves several purposes. When revenues are raised fairly equally across several different taxes, a state is unlikely to have high tax burdens for any single tax. Balancing revenue sources also reduces a state's vulnerability to large revenue fluctuations during recessions, sectoral decline or economic shocks. Since there is no perfect tax, a final reason to employ a good mix of taxes is to limit the inequities and inefficiencies that may result from any single tax.

As described below, the potential mix of a balanced tax structure is wide enough to offer a state significant discretion in choosing its own tax mix. By itself, a balanced revenue system does not define the "best" possible tax structure for a state. It is only one aspect of a high quality tax structure, whose ultimate goals also include tax fairness, economic efficiency, administrative efficiency and stable revenue-raising potential.

To measure a balanced revenue system, we evaluated the share of total state and local own-source general revenues (i.e., exclusive of federal aid) provided for by four separate taxes. The four taxes used were personal income taxes, general sales taxes, property taxes and all other taxes.

Points were then assigned based on how well each separate tax compared with an "ideal" range that would result in a well balanced and diversified revenue system. Points were assigned using 1985 U.S. Census data compiled by the Advisory Commission on Intergovernmental Relations (ACIR) according to the following formulas:

- *Personal Income Tax.* States received 30 points if personal income taxes accounted for 20 to 30 percent of state and local own-source revenues. Two points were deducted for every percentage point below 20 percent, and one point was deducted for every percentage point above 30 percent.

- *General Sales Tax.* States received 22.5 points if general sales tax revenues accounted for 15 to 25 percent of state and local own-source revenue. Two points were deducted for every percentage point outside this range.

- *Property Tax.* States received 22.5 points if general property tax revenues accounted for 15 to 25 percent of state and local own-source revenue. Two points were deducted for every percentage point above 25 percent, and one point was deducted for every percentage point below 15 percent.

- *All Other Taxes.* States received 15 points if other tax revenues accounted for 10 to 20 percent of state and local own-source revenue. One point was deducted for every percentage point outside this range.

Since business investments are long-term commitments to an area, an important consideration for business when investing in an area is the likelihood that the quality of services paid for through taxation — as well as the level of taxation — will remain stable over time. In addition, with the decline in federal aid and the increased vulnerability of state economies to recession and sectoral decline, states must now pay greater attention to fiscal stability.

To address these fiscal shocks without resorting to tax increases and service cuts, states need to have reserve funds available. Fiscal stability is also enhanced when spending — both direct spending and tax expenditures — is subject to close scrutiny and control. Therefore, the fiscal stability component of this tax measure is based on the presence and size of state "rainy day" reserve funds that address revenue shortfalls, as well as the presence of several fiscal policies that help states control spending.

Using 1986 data from the National Conference of State Legislatures (NCSL) and the April 1987 issue of *City and State*, points were assigned for the rainy day fund component as follows:

- *Rainy Day Fund.* States received 10 points if they had a rainy day fund and four points for every percentage point up to 5 percent of general revenue in their fund. Seven states that established funds in 1986 but had not yet funded them received 10 points. South Dakota, which repealed its fund in 1986, received no points.

Then, using 1984 data from ACIR, *Significant Features of Fiscal Federalism, 1985-1986 Edition*, points were assigned for the other fiscal policy measures in the following manner:

- *Fiscal Notes.* States received 10 points if they issued fiscal notes on the state and local government costs of proposed policies or legislation.

- *Program Evaluation and Sunset.* States received 10 points if they required regular evaluation and sunset of programs.

- *Tax Expenditure Budget.* States received 20 points if they had a legally-mandated tax expenditure budget with estimates of foregone revenues; 10 points if they had a legally-mandated tax expenditure budget that does not estimate foregone revenues; and 5 points if they issued a tax expenditure budget that is not legally-mandated or published annually.

Tax Fairness

States need to be concerned with tax

fairness from two perspectives: treating taxpayers in the same circumstances equally — *horizontal* equity — and tailoring tax burdens to the ability to pay — *vertical* equity.

Fairness helps build political credibility for state and local governments, mitigating individual and business taxpayers' perceptions that the tax system may benefit others at their expense. Horizontal equity also reinforces the neutrality of the tax system by minimizing the favorable treatment of certain economic activities or certain types of taxpayers. Thus, tax fairness can foster a sound business climate by buttressing government's capacity to deliver necessary services, and by placing all businesses on a "level playing field." Finally, a fair tax policy should reduce taxes for taxpayers with limited income and shield the working poor and moderate income families from a regressive tax system.

Five measures of tax fairness are included to develop this variable score. Three measures — sales tax exemptions, sales taxation of services and indexing of the personal income tax — are based on data from ACIR, *Significant Features of Fiscal Federalism, 1987 Edition*. The two sales tax measures are based on the 1987 tax year. Two other measures — state property tax relief and income taxation thresholds — are from the National Conference of State Legislatures publication, *State Tax Relief for the Poor*. Points were assigned on the following basis:

- *Sales Tax Exemptions.* States received 10 points for exempting food, 6 points for exempting utilities and 4 points for exempting drugs from the sales tax. Several states received four points for partial exemptions for utilities, 5 points for a tax credit for sales taxes on food, or 2 points for a tax credit for sales taxes on drugs. States with full exemptions on all these items received 20 points. States without a sales tax received 20 points.

- *Sales Tax on Services.* States received 5 points maximum for sales taxation of services. A state received 5 points for general taxation of most professional services, 4 points for broad taxation of services, 3 points for substantial taxation of services, 1 point for narrow taxation of services and no points for no or little taxation of services.

- *Personal Income Tax Indexing.* States received 10 points if personal income tax brackets were indexed to inflation. Two states that suspended indexing for 1986 received 5 points. States without a personal income tax received 10 points.

- *Circuit Breaker.* States received 20 points for a state-financed circuit breaker available to all taxpayers, 15 points if the circuit breaker was available to all homeowners and elderly renters, 10 points if relief was limited to all homeowners and renters who are elderly and disabled, and 8 points if relief went only to elderly homeowners. A state received 6 points if a state-reimbursed low-income homestead exemption was offered and 4 points if the exemption was limited to the elderly and disabled.

- *Low Income Threshold.* States received 20 points if the income threshold at which a family of four begins paying personal income taxes in 1988 was above the national poverty level. One point was added for every $1,000 above this level up to 25 points and 2 points were deducted for every $1000 below. States without a personal income tax received no points.

Fiscal Equalization

State policies to promote equal fiscal capacity among local governments are essential for a sound business climate. These policies increase the ability of all communities to provide a sufficient level and quality of services to firms and individuals. Furthermore, they reduce the opportunity for large property tax differentials between nearby communities to influence residential and firm location choices. More importantly, equalizing state fiscal aid can alleviate financial stress and high tax burdens in urban centers that have large service needs but low taxable wealth.

Fiscal equalization was measured by the extent to which state governments finance key service costs and provide revenue sharing aid to communities. Scores were based on 1985 Census Bureau data compiled by the Advisory Committee on Intergovernmental Relations according to the following formula:

- *Welfare Costs.* States received .2 points for every percentage point of total state and local welfare costs assumed by state government.

- *Health and Hospital Costs.* States received .2 points for every percentage point of total state and local health and hospital costs assumed by state government.

- *Education Costs.* States received 1 point for every percentage point of total state and local education costs assumed by state government between 30 and 70 percent.

- *General Revenue Sharing.* States received 1 point for every percentage by which its general revenue contribution exceeded the U.S. average, up to a maximum score of 20 points.

Tax and Fiscal Policy Data

	FISCAL STABILTY AND BALANCED REVENUE SOURCES								
	Personal Income Tax 30 max.	General Sales Tax 22.5 max.	Property Tax 22.5 max.	All Other Taxes 15 max.	Rainy Day Fund 30 max.	Fiscal Notes 10 max.	Program Eval. and Sunset 10 max.	Tax Expenditure Budget 20 max.	SUBTOTAL 160 max.
Alaska	0.0	0.0	16.5	6.3	30.0	0	10	5	67.8
Arkansas	18.8	22.5	20.0	15.0	0.0	10	0	5	91.3
Colorado	15.9	22.5	22.5	15.0	12.1	10	10	0	108.0
Delaware	30.0	0.0	15.3	6.6	30.0	0	10	0	91.9
Georgia	22.0	22.5	22.5	15.0	22.0	10	10	0	124.0
Idaho	24.5	22.5	22.5	15.0	10.0	10	0	0	104.5
Indiana	19.4	22.5	22.5	15.0	29.0	10	10	0	128.4
Kansas	14.1	19.2	22.5	15.0	0.0	10	10	0	90.8
Louisiana	1.7	22.5	16.3	9.5	0.0	10	10	20	90.0
Maryland	30.0	15.7	22.5	15.0	10.0	10	10	20	133.2
Michigan	23.6	17.6	16.9	15.0	23.7	10	0	20	126.8
Mississippi	3.9	22.5	22.2	15.0	11.5	10	0	0	85.0
Montana	10.6	0.0	13.2	10.0	0.0	10	10	0	53.8
Nevada	0.0	22.5	21.6	6.7	0.0	10	0	0	60.8
New Jersey	12.0	18.2	10.8	14.5	0.0	10	0	0	65.6
New York	30.0	22.5	22.5	15.0	12.3	0	0	0	102.3
North Dakota	0.0	16.8	22.5	6.8	10.0	0	0	0	56.1
Oklahoma	13.2	22.5	19.4	7.8	10.0	0	10	0	83.0
Pennsylvania	26.4	19.9	22.5	12.2	11.1	10	10	0	112.0
South Carolina	22.9	22.5	22.5	15.0	18.2	10	10	0	121.2
Tennessee	0.0	7.0	22.5	14.7	17.2	10	10	0	81.4
Utah	15.5	22.5	22.5	15.0	10.0	10	10	0	105.5
Virginia	28.2	17.0	22.5	13.6	15.3	10	0	0	106.6
West Virginia	21.9	22.1	19.7	14.6	0.0	10	10	0	98.3
Wyoming	0.0	12.3	21.9	10.9	30.0	10	10	0	95.1

For final *Tax and Fiscal Environment* score, rank and grade, please see *Policy Index*. For further detail on individual measures, please see the appendix text.

TAX FAIRNESS						FISCAL EQUALIZATION				
Exempt Food, Drugs,Utils. 20 max.	Sales Tax on Servs. 5 max	PI Tax Indexing 10 max.	Circuit Breaker 20 max.	Low Income Threshold 25 max	SUBTOTAL 80 MAX	Welfare 20 max.	Health & Hospital 20 max.	Education 40 max.	Gen. Rev. Sharing 20 max.	SUBTOTAL 100 Max.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	0	10	4	0.0	34.0	19.0	13.6	35.1	20.0	87.7
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	3	0	8	7.0	26.0	19.8	7.7	27.0	0.0	54.4
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	0	5	10	20.7	55.7	19.3	8.7	14.2	0.0	42.2
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	3	0	0	16.5	39.5	19.9	16.9	40.0	0.0	76.8
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	0	0	0	13.8	17.8	20.0	3.2	33.3	0.0	56.5
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	0	0	8	20.7	38.7	[illegible]	5.0	36.3	0.0	60.3
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	0	0	6	3.8	23.8	17.3	6.2	35.9	3.3	62.7
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	3	0	15	7.8	35.8	19.5	8.2	18.5	0.0	46.3
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	3	0	6	17.8	46.8	19.5	9.6	34.3	0.0	63.5
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	3	0	15	20.8	56.8	19.7	13.1	9.3	0.0	42.1
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	0	0	20	7.8	41.8	19.4	8.3	4.8	5.4	37.9
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	3	0	6	23.8	36.8	19.5	4.9	40.0	12.4	76.8
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	0	10	10	8.8	48.8	18.6	9.9	2.9	0.0	31.4
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	0	10	10	0.0	40.0	17.6	3.0	40.0	10.7	71.3
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	3	0	6	3.8	32.8	18.8	11.5	11.7	11.1	53.1
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	3	0	20	21.9	64.9	17.8	8.8	18.8	1.3	46.7
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	0	0	14	20.7	54.7	19.3	16.6	24.6	0.9	61.4
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	0	0	8	13.6	31.6	20.0	8.7	28.0	0.0	56.7
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	3	0	10	11.8	44.8	20.0	10.2	16.4	0.0	46.6
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	1	0	4	20.7	35.7	19.6	10.0	33.8	1.3	64.7
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	3	10	0	25.0	48.0	19.1	6.7	16.5	0.0	42.3
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	3	0	10	17.6	38.6	19.9	11.4	27.0	0.0	58.3
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	0	0	0	7.6	17.6	18.4	13.9	16.2	0.0	48.5
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	4	0	10	11.8	45.8	20.0	6.8	40.0	0.0	66.8
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	3	10	6	0.0	23.0	19.6	5.4	16.1	16.5	57.6

Appendix E: The Transfer Payment Investment Index

This Transfer Payment Investment Index comprises the *Transfer Payment Investment* measure in the Investing in Disadvantaged Individuals and Communities subindex of the Policy Index. It attempts to measure the extent to which a state uses income maintenance payments and other programs as investments in self-sufficiency of the individuals who receive — or are targeted by — them.

We have taken the investments states have made in AFDC recipients as a proxy for this effort and commitment (as opposed to including *all* transfer payment recipients, such as people receiving unemployment compensation, Social Security, food stamps or other transfer benefits). In general, we have looked for signs that there is an effort to help increase the capacity of AFDC recipients to help themselves, and a commitment to provide the funds, programs and services necessary to enable them to become productive members of the economy.

The Transfer Payment Investment Index has three components: evaluation of AFDC welfare-to-work programs, use of Job Training Partnership Act (JTPA) funds for AFDC recipients, and the availability of support services for the training and employment efforts of AFDC recipients. Each component was weighted equally to arrive at the Index score.

AFDC Welfare-to-Work Programs

State efforts to offer employment and training services to AFDC recipients have garnered increasing attention recently. In this component, we evaluate the range of services, stability, and coverage of employment and training services offered to AFDC recipients other than those funded with JTPA monies.

Range of Service

By *range of service*, we mean the varying range of services offered to participants in welfare-to-work programs, including work experience, classroom training and on-the-job training. Each service offered receives the same weight, though we strongly endorse classroom training and on-the-job training efforts as more effective means of integrating AFDC recipients into the world of work.

Job search assistance is not included since every state offers such assistance. In addition, adequate data on economic development linkages and options, though highly desirable, was unavailable and therefore not included.

Coverage

By *coverage* we mean two things:

- *Extent:* whether at least 50 percent of AFDC recipients are offered employment and training services, with states offering less than 30 percent being additionally penalized.

- *Grant Diversion:* the extent of coverage of grant diversion programs. Grant diversion programs typically divert all or a portion of an individual's AFDC benefits to the individual's employer as a wage subsidy. The diverted portion would normally have reverted to the state as an offset to the individual's earnings. Instead, the state gives it to the employer as an incentive to hire the AFDC recipient. Because this represents a significant cash investment by the state in the individual's employment, we have singled it out as an index of state commitment.

Stability

By *stability*, we mean states which have appropriated enough funds to maintain stable program levels or expand their programs despite changes in federal funding.

In evaluating states' welfare-to-work programs, we encountered problems of insufficient data. Much of the best data was available from special studies and not from routinely updated reports. In addition, the problem of comparability of data between and among the states continues — states use different definitions for the same concepts (such as "participants" or "placements"), or do not differentiate their spending for AFDC recipients in the same way. A more fundamental problem is that there are no measures of the *impact* of welfare-to-work programs across states. We can only get a sense of the amount and quality of the effort being made.

JTPA Support for AFDC Recipients

The Job Training Partnership Act Program (JTPA) is the major employment and training program for the economically disadvantaged in the nation.

This component attempts to evaluate the extent to which JTPA funds are used to aid AFDC recipients. Specific amounts of JTPA funding for AFDC recipients by states were not available. Instead, we rely on an assessment of the types of services AFDC recipients receive from JTPA and the extent to which JTPA plays a role in welfare-to-work programs across a state.

Support Services

In order for AFDC recipients to make the transition from welfare-to-work successfully, they require certain basic interim support services — principally child care, health services and transportation assistance, both during and after they receive training assistance. In this component, we make use of three measures.

Child Care

The availability of child care is measured by:

- *Number Served:* the percentage change in the number of Title XX child care slots provided in FY 1987 as compared to FY 1986.

- *Funding Effort for Low-Income Children:* the percent of state spending on child care in FY 1986 as a percent of the number of low-income children under six years old in the state.

Medicaid Extension

Here we measure whether a state adopts the federal option for extending Medicaid coverage to former AFDC recipients for a period of time.

Overall Assessment

This is an assessment of how extensive a state's support services for welfare-to-work programs are overall.

Unfortunately, data on support services are inadequate and seldom comparable. We found nothing suitable for rating the provision of transportation assistance, for example.

Transfer Payment Investment Data

	AFDC WELFARE-TO-WORK PROGRAMS				JTPA SUPPORT	SUPPORT SERVICES			
	Range of Service	Coverage				Child Care		Medicaid Extension	Overall
	Score (0-3)	Extent Score (0-2)	Grant Divers. %	Stability	Score (1-4)	# Served % Change	$ Available per Poor Child	Score (0-2)	Assessmt.
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
Alaska	2	2	0.0		1	–3.7	1,403.5	0	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
Arkansas	2	2	0.0		1	0.0	60.3	0	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Colorado	3	2	5.2		3	6.2	299.6	0	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Delaware	1	2	0.0	■	2	0.0	304.9	0	■
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
Georgia	0	1	0.0		1	0.1	196.8	0	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
Idaho	0	2	0.0		2	0.0	2.3	0	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
Indiana	1	2	0.0		2	–3.2	135.0	0	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
Kansas	0	1	0.0		2	17.0	133.6	0	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
Louisiana	2	1	0.0		1	–5.5	101.0	0	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Maryland	2	2	87.0		3	6.7	355.1	2	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Michigan	2	2	47.4		1	–3.6	44.1	2	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mississippi	0	0	0.0		1	–16.2	52.5	0	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
Montana	0	2	0.0		1	–0.2	19.6	0	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
Nevada	3	2	0.0		1	0.0	31.8	0	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
New Jersey	2	2	72.7		1	0.0	371.3	2	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
New York	3	2	84.7	■	2	5.1	533.5	2	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
North Dakota	1	2	0.0		2	0.0	0.0	0	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
Oklahoma	2	2	100.0		2	3.9	390.1	0	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
Pennsylvania	3	2	0.0		1	5.5	471.6	0	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
South Carolina	2	0	0.0		3	5.4	190.8	0	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
Tennessee	2	2	0.0		3	–11.9	152.5	0	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
Utah	0	2	0.0		2	–9.4	337.9	0	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
Virginia	0	2	0.0	■	2	–1.3	47.4	0	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
West Virginia	1	2	0.0		2	0.0	171.0	0	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	
Wyoming	0	2	0.0		1	–47.4	644.8	0	

For final *Transfer Payment Investment* score, rank and grade, please see *Policy Index*. For further detail on individual measures, please see the appendix text.

Transfer Payment Investment Data Sources

AFDC Welfare-to-Work Programs

Range of Service

Number of types of employment and training services (other than job search assistance) offered to participants in state welfare-to-work programs, 1986. 3 maximum.
Source: Demetra Smith Nightingale and Lynn C. Burbridge, *The Status of State Work-Welfare Programs in 1986: Implications for Welfare Reform* (Washington, D.C.: The Urban Institute, July 1987). Appendix Table VIII.

Coverage

- *Extent*
  Extent of coverage of a state's AFDC recipients under welfare-to-work programs. Score.
  A score of 2 is given to states with at least 50% coverage; states with less than 50% but greater than 30% coverage receive a 1; and a 0 is assigned to states with less than 30% coverage.
  Source: Demetra Smith Nightingale and Lynn C. Burbridge, *The Status of State Work-Welfare Programs in 1986: Implications for Welfare Reform* (Washington, D.C.: The Urban Institute, July 1987), pp. 109-110.

- *Grant Diversion*
  Percentage of state's public assistance population in covered counties that permit diversion of AFDC grants for welfare-to-work programs, 1986.
  Source: Nightingale, Demetra Smith and Burbridge, Lynn C. *The Status of State Work-Welfare Programs in 1986: Implications for Welfare Reform*. Washington, D.C.: The Urban Institute, July 1987, Appendix Table II.

Stability

States that have appropriated enough state funds to maintain stable program levels or expand their programs despite changes in federal funding, 1981-86.
Source: Demetra Smith Nightingale and Lynn C. Burbridge, *The Status of State Work-Welfare Programs in 1986: Implications for Welfare Reform* (Washington, D.C.: The Urban Institute, July 1987), p. iv.

JTPA Support for AFDC Recipients

JTPA Support

Role of JTPA in state AFDC work programs. Score.
A 4 is given to states where JTPA places a high priority on AFDC and delivers some work-welfare components in all local areas; a 3 to states where JTPA places a high priority on AFDC and delivers some work-welfare components in some local areas; a 2 to states where JTPA is encouraged to serve more clients and supports some work-welfare activities; and a 1 to states where work programs refer clients to JTPA, but there is no special priority on welfare.
Source: Demetra Smith Nightingale and Lynn C. Burbridge, *The Status of State Work-Welfare Programs in 1986: Implications for Welfare Reform* (Washington, D.C.: The Urban Institute, July 1987), Appendix Table V.

Support Services for AFDC Recipients

Child Care

- *Number of Children Served in Day Care*
  Children served or slots provided by Title XX Social Services Block Grant funds. Percentage change, 1986-1987.
  Source: Children's Defense Fund, draft statistics for *State Child Care Fact Book, 1987*, Washington, D.C.

- *Child Care Expenditures per Poor Child*
  Total Title XX funds available per poor child under 6 for child care assistance, FY 1986.
  Source: Children's Defense Fund, draft statistics for *State Child Care Fact Book, 1987*, Washington, D.C. Calculations by The Corporation for Enterprise Development.

Medicaid Extension

Optional state extensions of Medicaid beyond mandatory nine-month period to families no longer AFDC-eligible because they have earnings above the income disregard. Score. A score of 2 is given to states that have extended Medicaid for six months, a 1 for a three month extension, 0 if no extension is allowed.
Source: U.S. Dept. of Health and Human Services, Office of Family Assistance, *Characteristics of State Plans for Aid to Families with Dependent Children under Title IV-A of the Social Security Act* (Washington, D.C.: Government Printing Office 1987), p. 360.

Overall Assessment of Support Services

States that provide extensive support services to welfare-to-work programs, 1986.
Source: Demetra Smith Nightingale and Lynn C. Burbridge, *The Status of State Work-Welfare Programs in 1986: Implications for Welfare Reform* (Washington, D.C.: The Urban Institute, July 1987), p. 111.

It is in areas highlighted by (the) CfED report that America's economic future will be determined.

[illegible]

CfED's new report is the best guide to the groundbreaking policies that states have created to boost business competitiveness. Making the Grade is for businesses planning to move up or stay on top.

Making the Grade has totally changed the terms of the debate about economic development in our state.

[illegible]

Finally, there is an economic climate index that recognizes we will compete by the quality of our minds, not the poverty of our wages.

[illegible]

Economic Climate Project Sponsors

[illegible]

The Corporation for Enterprise Development

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